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Correspondence should be addressed to:

UNICEF Office of Research - Innocenti Via degli Alfani, 58 50121 Florence, Italy

Tel: (+39) 055 20 330 Fax: (+39) 055 2033 220 florence@unicef.org www.unicef-irc.org twitter: @UNICEFInnocenti facebook.com/UnicefInnocenti

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Students attend class at a Girls' Primary School in Wau, South Sudan, 2019.

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Time to Teach

Teacher attendance and time on task in Eastern and Southern Africa

Despina Karamperidou, Mathieu Brossard, Silvia Peirolo and Dominic Richardson

March 2020



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Foreword

We face a global learning crisis. Fifty-three per cent of children in low- and middle-income countries are 'learning poor': they cannot read and understand a simple text by the end of primary school age. In sub-Saharan Africa, this problem is even more acute, with the learning poverty rate reaching 87 per cent overall and ranging from 40 to 99 per cent across countries.

Teachers play the most vital role in any education system, imparting knowledge to students. But they are more than just conduits of information; teachers equip children with the tools to analyse, problem solve, think creatively and use information effectively – skills necessary to lead healthy and productive lives.

Notably, countries in Eastern and Southern Africa have invested heavily in teacher development. Yet education systems in the region are still failing to fully support and motivate their teachers, as illustrated by high teacher absenteeism rates which range from 15 to 45 per cent. Teachers attending lessons and spending time on task is a prerequisite for learning in school.

Teacher absenteeism and reduced time on task wastes valuable financial resources, short-changes students and is one of the most cumbersome obstacles on the path towards the Sustainable Development Goal on inclusive and quality education and to the related vision of the new UNICEF education strategy: Every Child Learns. Low teacher attendance can also cause much broader economic losses, since any hindrance to human capital development has a deteriorating impact on sustainable development across sectors. Therefore, enhancing teachers' presence in the classroom and ensuring that class time is spent teaching, can contribute significantly to the productivity and inclusive prosperity of a country.

The Time to Teach study collates and strengthens the evidence base on primary school teacher absenteeism in Eastern and Southern Africa. The study uses a mix of qualitative and quantitative research methods to provide critical insights into the factors that underpin the multiple forms of teacher absenteeism and time on task. It also examines how factors vary across countries, school types, gender of teacher and other teacher characteristics. Despite high levels of teacher absenteeism, the study shows that teachers are generally committed and that what is needed is education system strengthening. It is hoped that findings will inform workable solutions and policies that will ensure a motivated teaching force, increase the opportunities for children to learn at school and, ultimately, improve their life and work opportunities.

Mohamed Malick Fall Regional Director

UNICEF Eastern and Southern Africa

Gunilla Olsson

Director

UNICEF Office of Research - Innocenti

Executive summary

There is a learning crisis. Fifty-three per cent of children in low- and middle-income countries are in 'learning poverty', i.e. they cannot read and understand a simple text by the end of primary school age. In sub-Saharan Africa, the learning poverty rate is 87 per cent overall, and ranges from 40 per cent to as high as 99 per cent in the 21 countries with available data.

Teachers attending lessons and spending quality time on task is a critical prerequisite to learning. However, in sub-Saharan Africa, teacher absenteeism ranges from 15 to 45 per cent.³ Teacher absenteeism and reduced time on task wastes valuable financial resources, short-changes students and is one of the most cumbersome obstacles on the path toward the education Sustainable Development Goal and to the related vision of the new UNICEF education strategy: Every Child Learns.

Whilst the stark numbers are available to study, and despite teacher absenteeism being a foremost challenge for education systems in Africa, the evidence base on how policies and practices can influence teacher attendance remains scant.

Time to Teach (TTT) is a research initiative that looks at primary school teacher attendance in eight countries and territories in the Eastern and Southern Africa (ESA) region: the Comoros; Kenya; Rwanda, Puntland, State of Somalia; South Sudan; the United Republic of Tanzania, mainland; the United Republic of Tanzania, Zanzibar; and Uganda.⁴ Its primary objective is to identify factors affecting the various forms of teacher attendance, which include being at school, being punctual, being in the classroom, and teaching when in the classroom, and use this evidence to inform the design and implementation of teacher policies. The study draws from national, system-wide, qualitative data collections and school observations, and a quantitative survey of teachers working in 160 purposively selected primary schools (20 schools per country/territory).

How frequently are teachers absent?

In all countries, teachers are absent in multiple ways. Absence from the school and the classroom are the types of absenteeism least frequently reported by surveyed teachers (15.5 and 15.7 per cent respectively), while lateness to duty and reduced time on task (while in the classroom) are more frequently reported (16.7 and 17.8 per cent respectively). However, large and significant variations exist between countries.

¹ World Bank, 'Learning Poverty', <www.worldbank.org/en/topic/education/brief/learning-poverty>, accessed 16 February 2020. For a detailed definition of 'learning poverty', see Annex 1, Box 1.

World Bank, Ending Learning Poverty: What will it take? World Bank, Washington, D.C., 2019.

³ Bold, T., et al., 'What Do Teachers Know and Do? Does It Matter? Evidence from primary schools in Africa', Policy Research Working Paper no. 7956, World Bank, Washington, D.C., 2017.

Subsequent mentions made in this report to the 'countries' studied should be understood to refer to both the countries and territories listed here. A detailed report has been produced for each country and territory. Time to Teach country reports can be accessed at: United Nations Children's Fund Office of Research – Innocenti, 'Time to Teach', <www.unicef-irc.org/research/time-to-teach>, accessed 16 February 2020.

Which schools and teachers are more likely to experience absenteeism?

Teacher absenteeism is higher in rural areas (18 per cent) than in urban/peri-urban areas (15 per cent) and higher in public schools (17 per cent) than in private schools (13 per cent).⁵

'Moonlighting' teachers, who hold multiple jobs, are more likely to engage in absenteeism compared with teachers who receive income exclusively from the teaching profession (20 per cent vs 16 per cent), as are volunteer teachers compared with non-volunteer teachers (28 per cent vs 16 per cent).

There is no statistically significant difference between male and female teacher self-reported absenteeism in the region as a whole. In South Sudan, however, female teachers are far more likely (38 per cent) to report being absent compared with their male colleagues (23 per cent).

Why are teachers absent?

Across the eight countries, health is the most frequent reason given by teachers for explaining absence from school (62 per cent) and late arrival/early departure (53 per cent) and the second most frequent reason given for being absent from the classroom (51 per cent). Teachers facing health issues were also 1.3 times more likely to report spending less time on task (while in the classroom) than their healthy colleagues.

Weather – in particular for the late arrival/early departure form of absenteeism – was also frequently cited as a reason for absence (39 per cent), which potentially means that climate change issues are relevant for the education sector. Weather is also highly associated with classroom absenteeism and reduced time on task, especially in conjunction with poor school infrastructure. Teachers who consider the weather conditions in their assigned communities challenging, are on average 1.4 times more likely to be absent from the classroom (while at school) and to spend less time on task (while in the classroom) than teachers who do not perceive weather as a problem.

Teachers in all countries cited family reasons as a major contributor to low school attendance (35 per cent) and lack of punctuality (32 per cent). 'Family reasons' is a broad category that captures caring for family members (e.g. when a child or other family member falls ill) and attending familial events such as weddings and funerals. Teachers who reported being distracted due to family reasons were also 1.5 times more likely to reduce the time they spend teaching (while in the classroom) than teachers who did not face this type of challenge.

Head teachers have a key role to play in encouraging teacher attendance. Teachers who perceive their supervisor as actively encouraging their attendance are significantly more likely than teachers who do not share this view to be at school (22 per cent vs 15 per cent) and to spend more time on task (24 per cent vs 17 per cent). Beyond monitoring, being a good mentor and leader are important qualities that head teachers must possess to effectively discourage absenteeism among teachers.

Stronger parental and community engagement in teacher monitoring is also associated with improved teacher attendance and, in particular, with lower school and classroom absenteeism.

Except where otherwise specified, 'absenteeism' refers to the average of the four forms of the teacher absenteeism construct employed by the study: absence from school, arriving late/departing early, absence from the classroom, and reduced time on task (while in the classroom). For each of those forms, teachers reported how frequently they engage in the specific form of absenteeism. A binary variable for each form was ascribed – 1 if the teacher reported being absent once a week or more, and 0 if less than once a week – and then the mean of the four binary variables was calculated for each surveyed teacher.

Teacher attendance and time on task in Eastern and Southern Africa

The timing and delivery of pay is also linked to absenteeism. Teachers who receive their salary on time and with relative ease have lower rates of absenteeism than teachers who face delays and difficulties in collecting their pay, such as having to travel far to reach a bank. Salary delivery is also associated with school absenteeism and lack of teacher punctuality. In particular, those teachers who find receiving their salary challenging are on average 1.6 times more likely to be absent from school and 1.9 times more likely to arrive to school late or depart early than teachers who receive their salary without hassles.

Pre- and in-service teacher training affects teacher attendance in two ways. Insufficient or low-quality training deprives teachers of critical content knowledge and pedagogical skills, which affects their classroom attendance and time on task. At the same time, as most (in-service) training takes place during the school year and can last several days, it also contributes to school and classroom absenteeism.

Lack of critical teaching and learning materials (TLMs) is linked to absences from the classroom and with reduced time on task. On average, teachers who reported having sufficient access to TLMs are 2.6 times less likely to be absent from the classroom and 2.3 times more likely to spend substantial time on task (while in the classroom) than teachers with insufficient access to TLMs.

Ineffective teacher recruitment and inequitable teacher allocation increase student-teacher ratios (STRs) and teacher workload, which are directly linked with classroom absenteeism and reduced time on task. On average, teachers who report having too many classroom preparation tasks (like planning or marking) are 1.5 times more likely to spend less time on task than teachers who are not overly burdened by these activities. Additionally, teachers who report having too many administrative tasks (or other official school business to attend to) are 1.3 times more likely to be absent from the classroom compared with teachers with fewer administrative duties.

Beyond health, weather and family reasons, other factors external to education systems influence teacher attendance. In particular, strikes, distance to school and transportation are all linked to school absenteeism and lateness to duty. Conflict (primarily in South Sudan and northern Kenya) is associated with increased school absences and reduced time on task.

What are the promising practices and potential recommendations for policymaking?

Ensure that head teachers are trained in management and leadership. This includes teacher monitoring and oversight, curriculum implementation and supervision, instructional leadership and resource mobilization. Making this training a prerequisite for recruitment or promotion to principalship (along with other objective and clearly defined criteria) is also important for ensuring that teacher management is enhanced in every educational institution, leading to better teacher motivation and attendance.

Boost parental and community involvement as a way of improving teacher accountability and attendance. As a first step, this involves institutionalizing the monitoring role of parents and community groups and strengthening their representation on school councils and management boards. Raising awareness and building capacity of community actors is also necessary to increase their ability and motivation to monitor teacher behaviour. However, for community engagement programmes to increase teacher performance and attendance, experience in community organization and teacher buy-in are important prerequisites.

Remove obstacles to receiving pay and ensure the timely delivery of teacher salaries. This could be achieved by increasing pay points, especially in remote areas where teachers often have to travel for days to collect their salary. Establishing a rota system at the school level, to at least ensure that schools do not close around pay collection time, is another option. In areas with adequate internet access, alternatives such as mobile banking can also be considered.

Ensure that teacher training has a strong practical component and that training takes place only during holidays and weekends. This should increase the likelihood that teachers are well equipped to perform effectively in the classroom and that they achieve effective curriculum coverage. Ensuring that enough substitute teachers are available to cover teachers in training (during school days) is a way to safeguard both curriculum implementation and the teachers' work-life balance.

Make distribution of teachers across schools more equitable. This involves ensuring the enforcement of teacher allocation rules and could be achieved by strengthening institutional capacities for more equitable deployment of teachers across schools. Developing incentive strategies to make postings in rural and hardship areas more attractive, and decentralizing teacher deployment and allocation are two additional ways to increase teacher satisfaction with their geographic placement and reduce the disparities in learning conditions across schools.

Reduce the class size in the early years of primary school by prioritizing the deployment of more (and more experienced) teachers in early-year classes. Depending on the country, such 'game-changing' management decisions could be made at either the school, district or central levels.

Strengthen inter-sectoral collaboration to address factors beyond the education system that affect teacher attendance and time on task, in particular in relation to health and infrastructure. Increasing collaboration between the health and education sectors with reference to mental health is especially important in conflict-affected settings, where, according to respondents, the threat of violence reduces educators' intrinsic motivation and affects their school presence. The students' fragile mental state and difficulty following lessons (primarily due to post-traumatic stress disorder) further restricts the teacher's commitment to spending sufficient time on task. Where feasible without increasing the workload for teachers, progressing toward the concept of school as an integrated platform for basic services could be a promising option.



1. Introduction

Context and study rationale

An unprecedented learning crisis is currently unfolding: Fifty-three per cent of children in low- and middle-income countries cannot read and understand a simple text by the end of primary school age.⁶

Teachers are so integral to the learning process that without them, schools and education systems cannot meet their goals, and children cannot fully benefit from the public investment in these systems. Although no education system can function or does function without teachers, every system has to meet the challenge of schools that are understaffed, teachers who are overworked and children who are not being taught because of absenteeism – both 'authorized/justified' and 'unauthorized' – in the teaching workforce. In many low- and middle-income countries, lack of teacher attendance is a serious concern, not only in terms of teachers missing school, but also in terms of reduced time on task, caused by teachers arriving late or leaving early, failing to attend lessons when at school, or not teaching to topic or at all when present in the classroom.

Low teacher attendance and time on task are particularly prevalent in sub-Saharan Africa. According to the World Bank's Service Delivery Indicators study, on any given day, 15 to 45 per cent of all primary school teachers in the region are absent from school, and 23 to 57 per cent of primary school teachers are absent from the classroom (see Annex 2). The same study estimates that, on average, the loss of teaching hours due to teacher absenteeism corresponds to approximately 46 cents in every US dollar invested in education going to waste, which is equivalent to an annual wastage of between 1 and 3 per cent of each affected nation's gross domestic product (GDP). What is more, Afrobarometer data (drawn from 36 African countries) indicate that low teacher attendance contributes to unequal education outcomes, as teacher absenteeism is higher in schools that are remote, poorly funded and serve marginalized groups.

The Time to Teach (TTT) study is a research initiative that aims to address knowledge gaps that relate to the causes of primary school teacher absenteeism in eight countries and territories of the Eastern and Southern Africa (ESA) region: the Comoros; Kenya; Rwanda, Puntland, State of Somalia (hereafter, Puntland); South Sudan; the United Republic of Tanzania, mainland (hereafter Tanzania, mainland); the United Republic of Tanzania, Zanzibar (hereafter, Zanzibar); and Uganda. Empirical evidence from many of these countries suggests high rates of teacher absenteeism from school (ranging between 15 per cent in Kenya and 41 per cent in Zanzibar) and from the classroom (ranging between 42 per cent in Kenya and 53 per cent in Tanzania, mainland).

- 6 World Bank, 'Learning Poverty', <www.worldbank.org/en/topic/education/brief/learning-poverty>, accessed 16 February 2020.
- 7 Seven sub-Saharan countries participated in the SDI study: Kenya, Mozambique, Nigeria, Senegal, Togo, Uganda and the United Republic of Tanzania. Bold, T., et al., 'What Do Teachers Know and Do? Does It Matter? Evidence from primary schools in Africa', Policy Research Working Paper no. 7956, World Bank, Washington, D.C., 2017.
- Filmer, Deon, 'Education Quality in Sub-Saharan Africa', Presentation slides for the Research on Improving Systems of Education (RISE) Conference, June 2015. Available at: www.riseprogramme.org/sites/www.riseprogramme.org/files/inline-files/25_Filmer_SDI-RISE.pdf, accessed 16 February 2020.
- 9 Afrobarometer, < www.afrobarometer.org >, accessed 16 February 2020.
- 10 Subsequent mentions made in this report to the 'countries' studied should be understood to refer to both the countries and territories listed here.
- 11 World Bank, Data Catalog, 'Service Delivery Indicators', https://datacatalog.worldbank.org/dataset/service-delivery-indicators, accessed 16 February 2020; World Bank, 'Zanzibar Improving Student Prospects Project', Strategic Directions Paper, 2015.

Teacher attendance and time on task in Eastern and Southern Africa

In certain settings, such as South Sudan and Puntland, where such empirical evidence does not exist, anecdotal accounts suggest that both forms of absenteeism are at least as prevalent as in the other six contexts studied.¹² Low instructional time is also a region-wide concern, as teachers in many countries spend half or less of their scheduled time teaching.¹³

Research objectives

The key objectives of the study were to:

- Identify factors, both within and outside the education system, that affect primary school teacher attendance and time on task in the eight countries covered
- Examine variations and commonalities in the determinants of teacher attendance in different national settings as well as in different types of schools (e.g. public/private) and locations (e.g. rural/urban)
- Recognize promising policies and practices in improving teacher motivation, attendance and time on task, and encourage cross-country learning and policy transfer within the ESA region.

Definition, data and methods

The study moves beyond the conventional definition of teacher attendance – that of being present at school – to include other, subtler forms of teacher attendance, like being punctual, being in the classroom (while in school), and teaching when in the classroom (see Box 1). While there are many valid reasons for a teacher to be absent, the study does not distinguish between authorized and unauthorized absences, as its goal is to capture the total loss of time on task (during the school year), irrespective of the validity of the teachers' absences.

¹² Association for the Development of Education in Africa, (2017). Policy Brief: Reducing Teacher Absenteeism: Solutions for Africa; Examining the Contemporary Status of an Education System: The Case of the Republic of South Sudan. *Online Submission*.

World Bank, Data Catalog, 'Service Delivery Indicators'; Barnaba, Boboya J. E., 'Examining the Contemporary Status of an Education System: The case of the Republic of South Sudan', 2015.

Box 1. Concept of teacher attendance in the Time to Teach study

The TTT study introduces the concept of multidimensional teacher absenteeism. What this concept suggests is that lack of teacher attendance is a complex phenomenon that manifests in multiple ways, with each manifestation having a negative impact on teacher time on task, teaching quality and, ultimately, student learning. The concept moves beyond the traditional understanding of teacher absenteeism as merely school absence and distinguishes between four different types of teacher absence: (1) absence from school; (2) absence of punctuality (late arrival to and/or early departure from school); (3) absence from the classroom (while in school); (4) absence from teaching (i.e. reduced time on task while in the classroom).

Except where otherwise specified, 'absenteeism' refers to the average of the four forms of teacher absenteeism. For each form, teachers were queried on the average frequency with which they had been absent since the start of the school year and were asked to select one option from among the following five responses: never; a few times (less than three times); less than once a week; once a week; and more than once a week. A binary variable for each form of absenteeism was ascribed – 1 if the teacher reported being absent once a week or more, and 0 if less than once a week – and then the mean of the four binary variables was calculated for each surveyed teacher.

TTT is a mixed methods project, employing both qualitative and quantitative research tools. The study takes a systems approach toward explaining teacher absenteeism and therefore examines the relevance of factors at all levels of the education system, including the national, sub-national, community, school and teacher levels (see detailed exploratory framework in Annex 3). The study also evaluates whether factors outside of the education system may have an important role to play in determining teacher attendance, and if so, what that role is.

In total, 160 primary schools (20 schools per country/territory) were purposively selected based on the following three criteria: location (e.g. region/district), governance (public, private or community) and rurality (rural or urban/peri-urban). At each school, in-depth interviews were carried out with the head teacher, three teachers, and a member of the school council.¹⁴ A focus group discussion was also conducted with students in all schools and a teacher survey was administered to all teachers who were at school on the day of the visit.¹⁵ In all countries, national and sub-national education officers (in charge of teacher monitoring) and teacher union representatives were also interviewed.¹⁶ In total, 3,498 individuals participated in the study (see Table 1 and Annex 4 for more details on data and methods).¹⁷ Data collection, storage and management were in line with international best practice and the UNICEF Procedure on Ethical Standards in Research, Evaluation and Data Collection and Analysis (see Box 2).

- 14 Age, gender, years of experience and education were the selection criteria for interviewed teachers.
- 15 In each school, seven students (aged 10–13 years) participated in the focus group discussions. The sample was gender balanced. To rule out selection bias and convenience sampling, student respondents were identified via a lottery.
- 16 Most interviewees and focus group discussion participants provided (written or verbal) consent for audio *recording*. The responses of participants who did not consent to audio recording were transcribed in summary during the interviews/focus group discussions. Privacy and confidentiality were ensured for all respondents.
- Like all studies relying on self-reported data, TTT is not free of methodological limitations. Response bias may have been a challenge, as absenteeism is generally a taboo subject and it is unclear how truthfully teachers responded to questions around the nature and frequency of their absences, even though the principles of anonymity and confidentiality were highlighted during data collection. Selection bias may also have been an issue, as the teacher survey was administered only to teachers who were present at school on the day of the school visit. This means that some of the frequently absent teachers may not have been surveyed. To pre-empt this problem, all school visits were announced, and teachers were informed about them well in advance. Finally, the research team recognizes the small size of the TTT survey sample. For this reason, all findings reported here have been thoroughly triangulated through qualitative interviews and focus group discussions with key education stakeholders in all countries.

A structured observation tool was used to record enumerators' observations on teacher absences, teacher-student interactions, and teacher working relations during visits to selected schools. Observational data were used for validation and triangulation purposes.

Thematic content analysis was employed to code and analyse over 15,000 pages of transcribed interviews and focus group discussions. The Stata software package was used for the descriptive and correlational analysis of survey data.

Table 1. Number of study participants (by level of analysis and data collection method)

Respondent type	Data collection method	Number of participants	
National level			
National ministry of education officials, national teacher union representatives	In-depth interviews	30	
Sub-national level			
Regional/district education officers (including school inspectors, quality assurance officers and curriculum advisors)	In-depth interviews	97	
Community level			
Community representatives and school council members	In-depth interviews	150	
School level			
Head teachers	In-depth interviews	160	
Teachers	Survey	1,955 (478 of them also had in-depth interviews)	
Students	Focus group discussion	1,106	
Total number of respondents		3,498	

Box 2. A brief note on research ethics

The UNICEF Office of Research – Innocenti applied for ethical clearance for the TTT study to the Health Media Lab (HML) and to the Institutional Review Board of the Office for Human Research Protections in the U.S. Department of Health and Human Services, both located in Washington, D.C. Ethical clearance was granted in July 2018. The study was also cleared by the Ethics Review Board of Makerere University, Uganda, and Rwanda Education Board.

In all countries, study implementation was preceded by extensive consultation with national governments and key education stakeholders on research tool design, sampling and instrument administration.

All contracted partners were extensively trained in research ethics and abided by the UNICEF Procedure on Ethical Standards in Research, Evaluation and Data Collection and Analysis.

Report structure

The report is structured as follows: Section 2.1 presents findings on the frequency of teacher absenteeism in the eight countries, based on the analysis of the survey data collected from teachers in the purposively selected schools. Findings are reported by country and look at variations in the frequency of the various forms of teacher absenteeism, including absence from school and the classroom, and reduced time on task. Drawing from the same data set, section 2.2 reports significant differences in teacher absenteeism within countries and across school type (public or private), school location (rural or urban/peri-urban) and socio-demographic characteristics of teachers (e.g. gender, work status and level of education). Sections 2.3, 2.4 and 2.5 combine survey data and qualitative data from the interviews and focus group discussions to examine how different factors, both within and outside education systems, affect teacher attendance. Findings on the role of teacher management policies and practices, parents, school resources, community infrastructure, weather, and other factors are presented by thematic area. Section 3 discusses the implications of these findings for policies and programmes aimed at improving teacher attendance and time on task and highlights promising practices – i.e. interventions undertaken by governments and development partners that may have the potential to bring about positive change.



2. Key findings

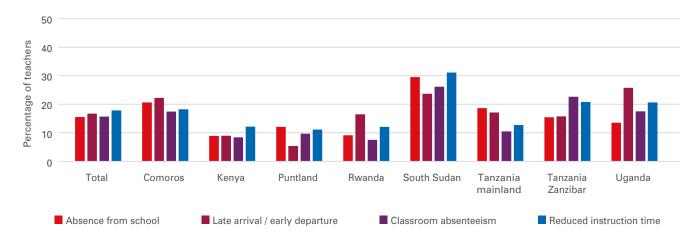
2.1. How frequently are teachers absent?

Confirming much of the existing literature, data drawn from the TTT survey – which was administered to 1,955 teachers working in 160 purposively selected schools across the ESA region – indicate that primary school educators are absent in various ways, albeit with varying degrees of frequency.¹⁸

In the TTT survey, teachers were queried on the average frequency with which they had been absent in various ways since the start of the 2019/20 school year and were asked to select one option from among the following five responses: never; a few times (less than three times); less than once a week; once a week; and more than once a week (see all survey questions in Annex 5).¹⁹

Self-reported teacher data are summarized in Figure 1, which shows the percentage of teachers who reported being absent at least once a week on average during the current school year, by form of absence and country.²⁰ Figures presented in this graph are close to previously reported averages based on self-reported data, but much lower than the rates of teacher absenteeism estimated from the results of past spot checks, where observations are made by researchers who arrive unannounced at a school (see Annex 2).²¹ This variation may be due, at least in part, to teachers' concerns over the potentially negative consequences of admitting engaging in absenteeism, which is typically frowned upon.

Figure 1. Percentage of teachers who reported being absent frequently (i.e. at least once a week), by form of absence, country and average across the countries and territories



- 18 Due to partial completion of the survey, findings presented in this section are based on self-reported data from 1,930 teachers.
- 19 In most countries, survey data were collected from September to October 2019 i.e. approximately seven months into the 2019/20 school year.
- 20 'At least once a week' is the summary of two teacher responses 'once a week' and 'more than once a week'. The percentage of teachers who reported having been absent in various ways 'more than a few times' (i.e. the summary of 'less than once a week', 'once a week' and 'more than once a week') since the start of the school year can be seen in Annex 6.
- 21 Price, J., M. Galvis and A. Channa, 'Understanding Teacher Attendance in Kenya: A case study of Embu County', National Foundation for Educational Research, forthcoming; Martin, Gayle H., and Obert Pimhidzai, *Service Delivery Indicators: Kenya*, World Bank, Washington, D.C., 2013.

Photo: © UNICEF/UNI312715/Houser

Teacher attendance and time on task in Eastern and Southern Africa

Across the region, 15.5 per cent of surveyed teachers reported being absent from school at least once a week. The highest national rates of school absenteeism were reported in South Sudan (30 per cent) and the Comoros (20.6 per cent) and the lowest in Kenya (8.9 per cent) and Rwanda (9 per cent).

Almost 17 per cent of surveyed teachers reported arriving to school late or leaving school early on a frequent basis (i.e. once a week or more). Among participating countries, the highest national rates of late arrival/early departure were reported in Uganda (25.7 per cent), South Sudan (23.7 per cent) and the Comoros (22 per cent) and the lowest in Puntland (5.3 per cent), and Kenya (8.9 per cent).

As much as 15.7 per cent of surveyed teachers reported missing lessons while at school at least once a week. Teachers in South Sudan and in Zanzibar reported the highest rates of classroom absenteeism (26 and 22.7 per cent respectively) and teachers in Rwanda and Kenya the lowest rates (7.6 and 8.4 per cent respectively).

Absence from teaching, defined as reduced time on task while in the classroom, was reported by 17.8 per cent of surveyed teachers as occurring at least once a week. At the country level, the largest percentages of teachers reporting spending less time on teaching than originally planned at a rate of once a week or more were in South Sudan (31 per cent) and Zanzibar (20.7 per cent) and the smallest in Puntland (11 per cent), Rwanda (12 per cent) and Kenya (12.1 per cent).

Box 3. Different forms of teacher absenteeism are correlated with each other

The four forms of the aggregate construct of teacher absenteeism employed in the TTT study – namely, being absent from school, arriving to school late and/or leaving early, being in school but absent from the classroom, and being in the classroom but not teaching (see Box 1) – are strongly correlated with each other (see details in Annex 7).

The high correlations between the four forms allowed analyses (presented in sections 2.2 and 2.3) about the types of school and teacher characteristics and personal views that are associated with those forms of absenteeism.

Unless otherwise specified, 'absenteeism' refers to this average of the four forms of the teacher absenteeism construct employed by the study: absence from school, arriving late/departing early, absence from the classroom, and reduced time on task (while in the classroom).

2.2. Which schools and teachers are more likely to experience absenteeism?

Beyond the differences between countries (as presented in section 2.1), analysis of the TTT survey data shows that differences in the frequency of self-reported absenteeism exist also within countries and across school type and location, and teacher characteristics such as work status and level of education. The findings summarized below are those for which the differences are statistically significant.²²

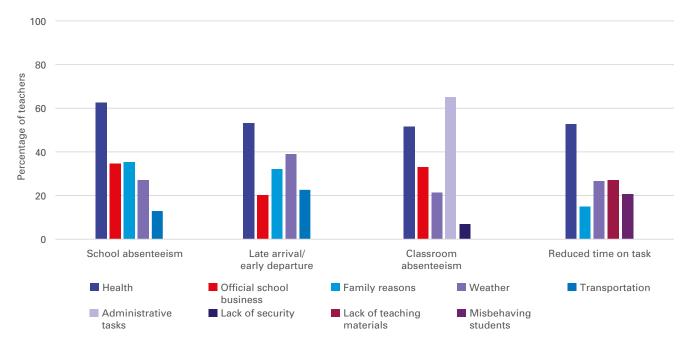
- School location: Across the region, absenteeism is higher in rural areas (18 per cent) than in urban/peri-urban areas (15 per cent). Such differences are statistically significant only in Kenya (11 per cent vs 2 per cent) and South Sudan. However, in South Sudan, absenteeism is higher in urban/peri-urban areas (34 per cent) than in rural areas (24 per cent), differing from the overall trend in the region.
- School governance: Overall, approximately 13 per cent of private schools across the countries are affected by teacher absenteeism compared with 17 per cent of public schools. The lowest rate of private school absenteeism was reported in the Comoros (1 per cent vs 26 per cent of public schools). Comoros and South Sudan are the two countries with significant differences in reported absenteeism between public and private school teachers.
- Gender: There is no statistically significant difference between male and female teacher self-reported absenteeism in the region as a whole. In South Sudan, however, female teachers are far more likely (38 per cent) to report being absent compared with their male counterparts (23 per cent).
- Level of education: Absenteeism rates differ according to the highest level of education a teacher has received. Vocational school graduates reported the highest level of absenteeism (20 per cent) followed by secondary school graduates (17 per cent) and university graduates (14 per cent). Teachers who reported completing primary school as their highest level of education reported the lowest rate of absenteeism (12 per cent).
- Work status: In all countries, teacher absenteeism is higher among volunteer teachers (28 per cent) than non-volunteer (civil servant or contracted) teachers (16 per cent). This result is driven by South Sudan, where volunteers constitute a large proportion of the teaching force and where most volunteer teachers in the TTT sample come from.
- Earnings: Teachers who supplement their teaching income through non-teaching activities have a higher rate of absenteeism (20 per cent) than those who receive income from teaching only (16 per cent). In all countries, being the sole earner in the household does not have a significant association with absenteeism. Teachers who report being in the highest third of salaries within their country report lower rates of absenteeism (15 per cent) than those who report being in the lowest third of salaries (18 per cent). Receiving salary payments on time is also strongly associated with lower levels of absenteeism across the region. Teachers who report receiving their salary in a timely manner are less absent (14 per cent) compared with those who report delays (19 per cent).
- Benefits: Receiving a cash benefit is associated with lower absenteeism across the countries than receiving no cash benefits (15 per cent vs 19 per cent). Teachers who receive a non-cash benefit are also less likely to report being absent than those who do not receive non-cash benefits (14 per cent vs 19 per cent).

When differences are not statistically significant it does not mean they did not exist, but rather that one cannot claim confidently enough that they exist. The findings below show significance at the 5 per cent level.

2.3. Why are teachers absent?

The main reasons for absenteeism reported by the teachers in the TTT survey are presented in Figures 1 to 5 in Annex 8, by country and constitutive form of absenteeism (as discussed in Box 1). Overall, in the eight countries, ill health is the most frequent answer given for the absence from school, late arrival/early departure and reduced time on task forms, and the second most frequent answer given for absence from the classroom. Weather – in particular for late arrival/early departure – and family reasons were also very frequently mentioned (see Figure 2).²³

Figure 2. Primary reasons for absenteeism in the eight countries, by form of absenteeism



Analyses of the statistical associations between the reasons that surveyed teachers gave for being absent and the frequency of absenteeism provide additional empirical evidence on the determinants that are making a difference in absenteeism across teachers. Overall, teachers quoting strikes, distance to school and difficulties with receiving pay as reasons for absenteeism are more likely to be absent from school or to arrive late/depart early. Those citing weather and lack of critical teaching materials are more likely to be absent from the classroom or in the classroom but not teaching. There are also other reasons associated with more frequent absenteeism (see Annex 9, Table 1).

Surveyed teachers were also asked to give their personal views and opinions, by indicating to what extent they agreed or disagreed with more than 30 statements about different subjects such as job satisfaction, training opportunities, school and work environment, the work of the head teacher and school inspectors, and parents' perceptions about school and about teacher absenteeism (see full list in Annex 5). Assessing the associations between (self-reported) absenteeism and personal views/opinions helped to strengthen the analysis of key drivers of absenteeism. Overall, the associations between absenteeism and opinions are not strong, with the exception of opinions related to the: (1) role of the head teacher; (2) collection of salary; and (3) lack of knowledge and skills (see Annex 9, Table 2).

²³ Family obligations is a broad category that captures caring for family members (e.g. when a child or other family member falls ill) and attending familial events such as weddings and funerals.

The analysis of survey data provides a useful snapshot of the multitude of interacting factors that influence teacher attendance in the region. Interviews and focus group discussions with teachers, head teachers, students, community representatives, government officials and education officers complement these data by providing a contextual understanding of teacher absences. In the following sections, key factors affecting teacher attendance – factors both internal and external to education systems – are further unpacked and discussed on the basis of the combined analysis of survey and qualitative data from the field.

2.4. Education system factors affecting teacher attendance

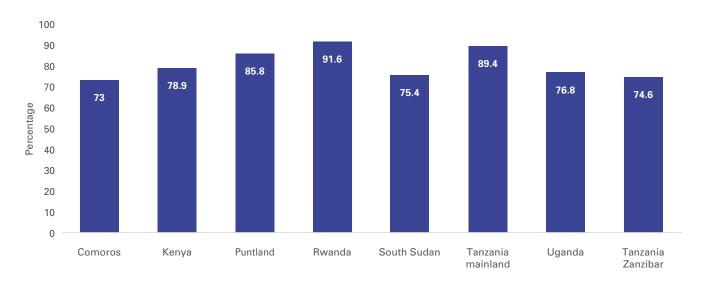
2.4.1. Teacher monitoring

Accurate monitoring and efficient reporting of teacher absences and effective sanctioning of frequently absent teachers are essential for improving school and classroom attendance and for increasing time on task. In most countries, these responsibilities are shared among various stakeholders, including school managers, sub-national education officers, and local communities.

The monitoring capacity of head teachers

In the majority of schools visited during the implementation of the TTT study, mechanisms for monitoring school absence and punctuality existed and were sufficiently utilized by head teachers and their deputies. These included staff registers filled in by school management, and attendance registers (clocking-in/clocking-out books) signed by individual teachers upon their arrival and when leaving the school premises. Most of the interviewed head teachers reported using these tools on a daily basis, a statement confirmed by the majority of surveyed teachers, 80 per cent of whom maintained that their supervisors record absences consistently and without fail (see Figure 3 for differences between countries).

Figure 3. Percentage of teachers who agreed or strongly agreed with the statement 'The head teacher always records teacher absences', by country/territory



Teacher attendance and time on task in Eastern and Southern Africa

However, the monitoring capacity of head teachers is much more relevant in verifying teacher presence at school and punctuality and less so in reporting subtler manifestations of absenteeism, like absence from the classroom or reduced time on task while in the classroom. For instance, few of the interviewed teachers verified that head teachers engage in classroom observations and provide feedback on a regular basis. Inadequate head teacher training in personnel management and leadership skills, the absence of meritocratic selection processes, and excessive workload were among the factors most frequently cited by interviewed stakeholders as prohibiting the ability of head teachers to effectively monitor, manage, and provide teaching mentoring to teachers, and thus discourage all forms of absenteeism. Head teachers' frequent absences, still endemic in many countries and schools, especially in rural areas, also weaken the monitoring and supervision of teachers, resulting in frequent absences from school and the classroom, and poor instructional time use.

Teacher survey data confirm that schools with a good leader as head teacher are less likely to experience high rates of teacher absenteeism (see Annex 9) and highlight the crucial role of head teachers in encouraging teacher attendance and time on task:

- Only 15 per cent of teachers who agreed (or strongly agreed) with the statement 'The head teacher discourages teacher absences' reported being frequently absent, compared with 22 per cent of teachers who did not share this view. Teachers who perceived the head teacher as actively encouraging their attendance were also less likely to report spending reduced time on task while in the classroom (17 per cent vs 24 per cent).
- Almost 15 per cent of teachers who agreed with the statement 'I'm happy with the feedback I receive from the head teacher on my work' reported being frequently absent, compared with 24 per cent of teachers who did not agree with this statement. Teachers who shared this view were also less likely to report spending less time on task (16 per cent vs 26 per cent).
- Teachers who saw the head teacher as a competent manager and agreed that 'The head teacher manages the school and the teachers well' were less likely than those who did not share this view to report high levels of absenteeism (15 per cent vs 24 per cent) and reduced time on task (17 per cent vs 25 per cent).

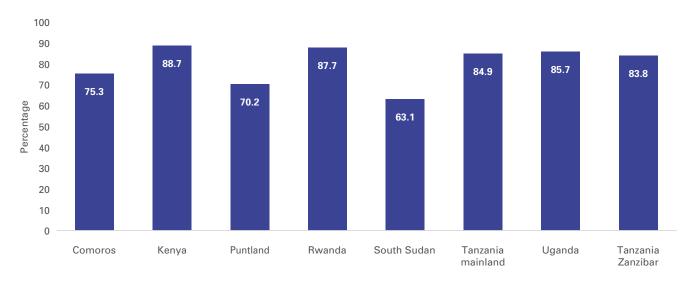
These findings point to the need to further strengthen the mentoring, management and monitoring capacities of head teachers in order to improve teacher attendance and time on task.

The monitoring capacity of education officers

In many countries, measures designed to monitor teacher school absences and time on task are not enforced regularly or consistently, thus allowing teachers to be absent in various ways. In all countries, education officers, who are tasked with visiting schools for inspection and monitoring purposes, feel restricted in their capacity to perform their duties due to lack of resources, particularly lack of personnel, means of transportation, and travel and accommodation funds. Respondents in all countries also pointed out that there is an unequal distribution of resources among sub-national education offices. These challenges appear to affect rural and remote schools more frequently than urban schools, as supervision in rural and remote areas is often costlier and therefore less frequent.

Visiting schools frequently is a challenge in all countries, but the situation is exacerbated in South Sudan and Puntland due to the additional pressures of conflict, political instability and the absence of stable education governance. Relatedly, teachers have different perceptions about the capacity of school inspectors to curb absenteeism. While 89 per cent of surveyed teachers in Kenya and 88 per cent of those in Rwanda agreed or strongly agreed that school inspectors discourage teacher absences, only 63 per cent of their counterparts in South Sudan and 70 per cent of those in Puntland held the same opinion (see Figure 4).

Figure 4. Percentage of teachers who agreed or strongly agreed with the statement 'School inspectors and academic advisors discourage teacher absenteeism', by country/territory



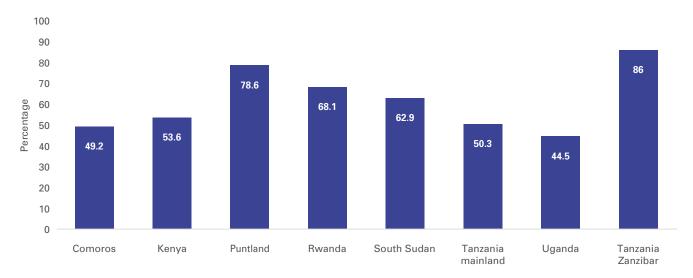
Interviews with stakeholders point toward an association between frequency of school visits and teacher attendance rates. In all countries, schools visited more frequently by inspection officers and academic advisors tend to have a lower rate of teacher school absenteeism and fewer instances of lateness to duty. Survey data confirm this link. Compared with those who disagreed with the statement, teachers who agreed that 'School inspectors and academic advisors visit this school regularly' were significantly less likely to report high levels of absenteeism (15 per cent vs 18 per cent) and were less likely to frequently reduce their time on task (17 per cent vs 20 per cent). Effective mentoring and motivation also seem to matter for teacher attendance, as fewer teachers who believed that 'School inspectors and academic advisors motivate and inspire school staff' reported high levels of absenteeism compared with those who did not share this view (15 per cent vs 18 per cent).

The monitoring capacity of parents and local communities

Despite significant variations between countries, 65 per cent of surveyed teachers overall perceive parents as being actively involved in school matters (see Figure 5). However, parents are seen as being significantly more engaged in urban schools than in rural schools (63 per cent vs 56 per cent) and in private schools compared with public schools (73 per cent vs 63 per cent).

Interviews with stakeholders suggest a positive association between greater community and parental involvement and lower school and classroom absenteeism. Survey data also indicate that schools that maintain better relations with parents are also those where teachers feel confident that their students are learning (see Annex 9). In particular, 26 per cent of teachers who agreed with the statement 'Most parents are actively engaged in school matters' reported that their students often do not understand the lesson delivered, compared with 35 per cent of teachers who did not share this view. Similarly, teachers who believed that 'Most parents appreciate the value of education and encourage pupils' attendance' were less likely to report that their students frequently struggle to follow lessons compared with teachers who felt unsupported by parents and isolated from the local community (26 per cent vs 33 per cent).

Figure 5. Percentage of teachers who agreed or strongly agreed with the statement 'Most parents are actively engaged in school matters', by country/territory

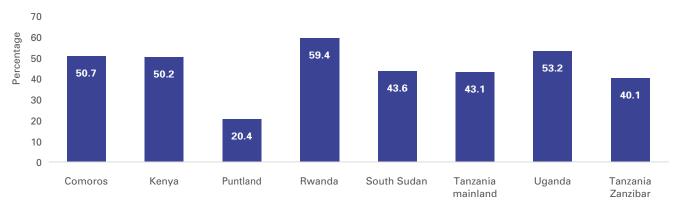


Absence of system coherence, and tensions between levels of authority

Most education systems suffer from incoherence around teacher monitoring and sanctioning. Especially in recently decentralized countries, like Kenya and the Comoros, communication gaps, insufficient fiscal transfers, and other tensions between national and sub-national levels of authority inhibit teacher monitoring and result in delayed actions against teacher absenteeism. The roles and mandates of actors at different levels of authority are often unclear, and education officers have varying degrees of awareness of their duties and obligations with regard to monitoring and sanctioning teacher absences when conducting school visits. Practice frequently deviates from official expectations, and delays in handling disciplinary cases are attributed to lack of awareness of the process of indictment. Teachers who are frequently absent are described as not fearing consequences since they are aware of the long and bureaucratic sanctioning process. Consequently, it is critical to establish an accountability framework of actors involved in teacher monitoring and sanctioning, and to ensure that the delegation of monitoring and

sanctioning tasks is coherent with financing, information and incentives provided to decentralized actors.²⁴ An official standardized process of sanctioning absenteeism is established in most countries. Typically, it involves filing a report, sending out warning letters, requesting that the teacher writes an apology letter, inviting the teacher to a disciplinary hearing, and, when necessary, deducting pay for the number of days missed or suspending the teacher. However, in many schools, interviewed stakeholders maintained that this process is rarely put in motion and that chronically absent teachers are typically transferred to another school rather than interdicted. Survey data confirm this claim, with only 45 per cent of surveyed teachers in the region reporting that inspectors sanction absenteeism frequently. However, significant differences exist between countries in this regard. Surveyed teachers most often perceived frequent sanctioning of absent teachers in Rwanda (59 per cent) and in Uganda (53 per cent) and did so least often in Puntland (20 per cent), and in Zanzibar (40 per cent) (see Figure 6).

Figure 6. Percentage of teachers who agreed or strongly agreed with the statement 'School inspectors and academic advisors frequently sanction teacher absenteeism', by country/territory



Box 4. How the absence of a clear sanctioning system affects teacher attendance in Zanzibar

In Zanzibar, it appears that rules and regulations for school teachers and a teacher code of conduct are lacking at the central level of authority. As a result, most cases of teacher misconduct are settled between the teacher concerned and the head teacher, without a transparent sanctioning process. Even when cases of misconduct are reported to the sub-national or national level of authority, there appear to be minimal consequences. This teacher monitoring and sanctioning system is seen as too loose to hold teachers accountable for their behaviour.

"Let me frankly say that here in Zanzibar there is a problem of *muhali*, which means 'knowing each other'. Once you are in good relations with someone, you cannot take any action against him/her. It affects much because sometimes the head teacher reports to the ministry concerning the misbehaviours of teachers, but no action is taken against them, as there is a sort of relations. You know, here in Zanzibar we are so much affected by this relation problem – because it is a small area where many people know each other – unless someone is too much misbehaved, measures will not be taken against her/him."

- District education officer, West Unguja, Zanzibar

²⁴ Pritchett, Lant, 'Creating Education Systems Coherent for Learning Outcomes: Making the transition from schooling to learning', RISE Working Paper, Research on Improving Systems of Education, December 2015.

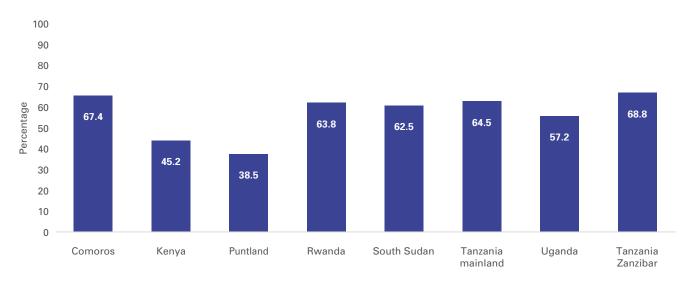
2.4.2. Teacher training

The vast majority of teachers in the region (94 per cent) have received some form of training, yet there are significant variations between countries. In Kenya and Zanzibar, 99 per cent of surveyed teachers were trained, while in South Sudan and Puntland this figure stands at 60 per cent and 79 per cent respectively. Teacher training also varies by teacher characteristics. Across the eight countries, slightly more female teachers have received training than their male counterparts (96 per cent vs 92 per cent). Volunteer teachers, who are typically untrained, constitute a considerable portion of the teaching force in South Sudan and the Comoros only. The overall figures for untrained teachers and non-volunteer teachers across the region is 18 per cent and 96 per cent, respectively.

Irrespective of their level of training and education, the vast majority of surveyed teachers are confident that they have the knowledge and skills required to teach well (89 per cent). However, interviewed head teachers and school inspectors often argued that teachers lack the content knowledge and pedagogical skills required for quality teaching. Part of the problem lies with pre-service training, which respondents in all countries perceived as insufficient and of low quality. In-service training, while steadily increasing in most countries, was also largely seen as inadequate and poorly linked to the actual needs of teachers in the classroom, in addition to sometimes being organized during school time hence increasing teacher school and classroom absenteeism.

Across the region, 60 per cent of teachers believe that they have access to training opportunities, but differences between countries are pronounced in this regard, with only 38 per cent of teachers in Puntland and 45 per cent of teachers in Kenya feeling this way (see Figure 7).

Figure 7. Percentage of teachers who agreed or strongly agreed with the statement 'I have access to training opportunities', by country/territory²⁵



25

The 'training opportunities' cited in the statement refer to in-service training.

According to survey data, insufficient training is associated with higher levels of absenteeism in the region (see Annex 9). Interview data also suggest that lack of specific pedagogical skills – such as those needed for engaging appropriately with learners, classroom management, time management, and developing effective schemes of work – affects teacher classroom attendance and time on task.

In Puntland and South Sudan, interviewed teachers argued that national plans to improve in-service teacher training have not been fully implemented. In Kenya, Rwanda and Uganda, respondents – from community representatives up to ministry officials – were especially concerned with teachers' capacity to implement the newly introduced competency-based curricula and stressed the weaknesses of relevant training sessions, which include limited follow-up and unsuitable modes of delivery. Language training in Rwanda and the Comoros, where the language of instruction has recently changed (see Box 5), are also largely perceived as insufficient, difficult and lacking in support. In the multilingual countries of the region, teachers struggle with the language of instruction and often translate the curriculum into the local language for students, which affects time on task. Survey data confirm that the mismatch between the language of instruction and the language students speak at home is associated with the confidence teachers have that their students are learning: teachers who cited language of instruction as a reason for absenteeism were 1.47 times more likely to have reported that their students frequently struggle to follow lessons content and discussions than those who had not given this as a reason for absence.

Box 5. Policies of Rwanda and the Comoros on the language of instruction in primary school

In Rwanda and the Comoros, students and teachers alike expressed difficulties with the language of instruction, a challenge which negatively affects teaching quality. In Rwanda, Kinyarwanda (the lingua franca) is the language of instruction for the first three years of primary school (Primary 1–3), after which English becomes the language of instruction and Kinyarwanda and French can be taken as discrete subjects. The utilization of the lingua franca in the first three years of primary school is meant to make early learning and literacy easier for students. In the Comoros, in contrast, its lingua franca, Shikomori, is the language of instruction in pre-primary school only, switching to French at the beginning of primary school. Some feel that it would be advantageous to continue Shikomori further into primary school.

"The challenge, I would say, is that even though the teachers are academically qualified, they need to improve their knowledge of the English language ... English is the language of instruction, but most teachers don't have sufficient training in English, and by the time the pupils enter P4, P5 and P6, teachers must be sufficiently proficient in the usage of English language. This is still our biggest challenge, even after trying various remedies."

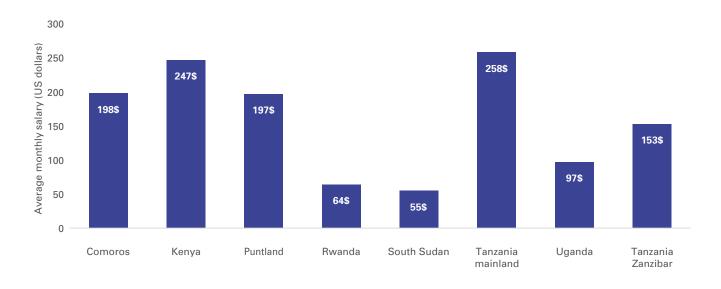
- Ministry of Education official, Kigali, Rwanda
- "Teachers have a lot of difficulty instructing students, because the language of instruction is a second language, not the native language. And many students have huge difficulty understanding and expressing themselves."
- Teacher, urban private school, Ngazidja, the Comoros

Despite being perceived as infrequent and inadequate, in-service training, seminars and workshops are a major cause of school absenteeism in most countries, as they often take place throughout the school year and outside the school premises and can last for up to two weeks. Training can also reduce teacher classroom attendance, when taking place at school. Finally, teachers' participation in both on-site and off-site training can directly affect curriculum coverage. In mainland Tanzania, for instance, the teachers interviewed often argued that they are informed of training seminars only once they arrive at school, which prevents them from coordinating lessons so these do not clash with training. In Uganda, it is common for students to be sent home, or for schools to be closed for several days during training. Survey data confirm the association between absenteeism and in-service training: Surveyed teachers who reported studying or being in training at the time of taking the survey had a higher rate of absenteeism than their peers who were not involved in professional development activities (40 per cent vs 33 per cent).²⁶

2.4.3. Teacher salaries, benefits and career development

In most of the ESA region, teacher salaries are superior to those of other professions with similar skill levels.²⁷ Yet the average salary in the sample of surveyed teachers is still only US\$156 per month. What is more, teacher pay varies widely between countries (*see Figure 8*). Within a given country too, teachers receive unequal pay. While differences in the average monthly salary of public and private school teachers are not significant, teachers in rural schools reported receiving a lower average monthly salary (US\$140) than their peers in urban and peri-urban schools, whose average (self-reported) monthly salary stands at US\$174. Volunteer teachers, who are usually compensated by the local community, reported receiving little or no pay.

Figure 8. Average monthly salary reported by surveyed teachers, in US dollars, by country²⁸



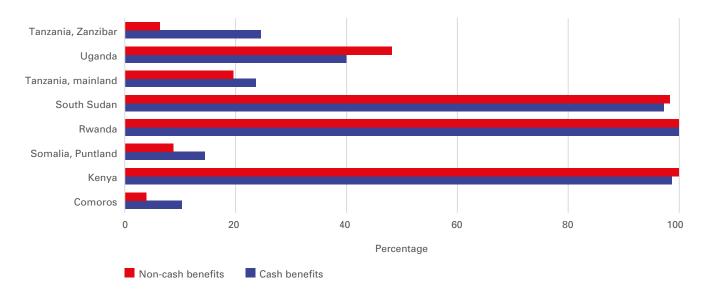
²⁶ Analysis done on the frequency of absenteeism 'more than a few times'

²⁷ United Nations Children's Fund Eastern and Southern Africa Regional Office, 'Teachers: A review of the challenges in improving teacher performance to secure improved outcomes for children's learning' (draft working paper), UNICEF ESARO.

²⁸ Differences in the salary of teachers in the United Republic of Tanzania, mainland; and Tanzania, Zanzibar may be due to the small size of the teacher sample.

Beyond base salaries, significant cross-country differences also exist in terms of cash and non-cash benefits for teachers (*see Figure 9*). Furthermore, across the eight countries, more rural than urban school teachers said they receive both types of benefits (64 per cent vs 45 per cent), although these benefits are rarely enough to close the wage gap between the two groups. Additionally, more male than female teachers reported receiving cash benefits (65 per cent vs 50 per cent) and also non-cash benefits (61 per cent vs 38 per cent).

Figure 9. Percentage of surveyed teachers who reported receiving cash and non-cash benefits, by country



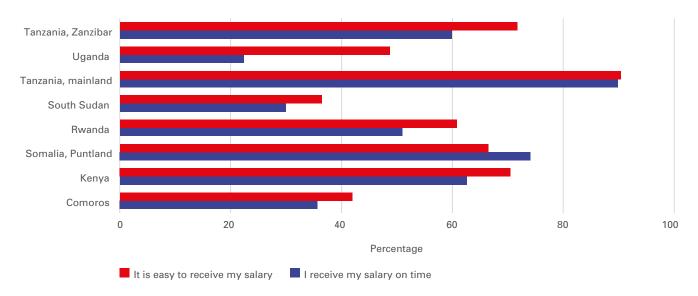
Irrespective of their base salary and additional allowances, only 31 per cent of surveyed teachers stated that they are satisfied with their pay and only 42 per cent of them considered their salary sufficient to cover monthly household expenses. However, significantly more teachers in urban schools are satisfied with their salary than teachers in rural schools (35 per cent vs 28 per cent), while more male than female teachers consider their salary sufficient to cover monthly household expenses (62 per cent vs 28 per cent).

Establishing clear progression structures is important for making the teaching profession more attractive to prospective candidates and for enhancing the performance and attendance of teachers. However, in some countries and territories, including South Sudan and Puntland, teacher salary scales are not linked to training, experience and performance. What is more, in other settings, like Kenya, Uganda and Zanzibar, where promotions are conducted on the basis of the attainment of higher qualifications and meeting other objective factors, thousands of teachers have been serving in the same position for years, due to budgetary constraints and the limited availability of posts for those eligible for promotion. Both realities act as demotivating forces for the teaching profession.

Only 56 per cent of surveyed teachers reported receiving their salary on time, although significant variations exist between countries in this regard (see Figure 10). While 89 per cent of teachers in the mainland Tanzania and more than 60 per cent of teachers in Zanzibar and Kenya are satisfied with the timing of their payment, only 22 per cent of public school teachers in Uganda and 30 per cent of those in South Sudan are equally content. In Uganda, the salaries of eligible teachers can be delayed for several months due to weaknesses of the new, centralized payroll payment system. In South Sudan, the continued economic crisis, fuelled by the ongoing conflict, has undermined the ability of the government to pay teacher salaries on time. Across the eight countries, urban school teachers are more likely to receive their salary on time than rural school teachers (63 per cent vs 50 per cent), while differences between public and private school teachers in this regard are significant only in South Sudan.

Finally, 64 per cent of surveyed teachers reported that it is easy to receive their salary. Teachers in mainland Tanzania and Zanzibar, and Kenya, who can access and spend their salary via a mobile phone application, have the highest positive perceptions about this matter (90 per cent, 72 per cent and 70 per cent respectively), while teachers in South Sudan and the Comoros have the lowest (37 per cent and 42 per cent respectively) (see Figure 10). Within countries, significant variations in the level of positive perceptions exist between teachers in rural and urban schools (60 per cent vs 70 per cent), as the former often have to travel long distances to reach a pay point and collect their salary. According to respondents, in some extreme cases, teachers can travel for up to a week to collect their pay and schools can remain closed for days around pay collection time.

Figure 10. Percentage of surveyed teachers who agreed or strongly agreed with the statements 'I receive my salary on time' and 'It is easy to receive my salary', by country/territory



Respondents in all countries drew links between low, delayed, and difficult-to-collect salaries and different forms of teacher absenteeism. Wages insufficient to cover teachers' basic living expenses cause them worry and stress, which affects their time on task and overall motivation. Low and delayed salaries also lead to strikes, which are a prominent cause of school absenteeism in the region (see Annex 9, Table 1). Coming to school late or leaving early, as well as not spending the required time on task, are also considered consequences of teachers' discontent over delayed or insufficient salaries and benefits. In certain countries, a substantial number of teachers seek alternative employment, thus missing school or arriving late and departing early. In the Comoros and Zanzibar, for instance, nearly one third of surveyed teachers reported gaining money from an activity other than their teaching career. Of those teachers, the majority reported earning their supplementary income from either farming or tourism, or from tutoring and/or teaching in another school. Finally, the absence of promotion opportunities hinders teachers' motivation to go to school and to teach.

Despite what interviews suggest, survey data show that teacher salary levels are significantly associated with absenteeism only in Zanzibar and South Sudan, where more teachers in the lowest wage tercile report being frequently absent compared with those in the middle and high terciles. In fact, the timing and ease of receiving pay seems to have more of an impact on absenteeism than the amount that teachers receive. Across the eight countries, teachers who receive their salary on time and with ease have much lower rates of absenteeism than teachers who face delays and difficulties in receiving their pay. In particular, experiencing

difficulties in receiving pay is strongly associated with school absenteeism and lack of punctuality. Teachers who find receiving their salary challenging are 1.6 times more likely to be frequently absent from school and 1.9 times more likely to arrive to school late or leave early than their peers who receive their salary without major hassles (see Annex 9).

Box 6. Low salaries do not always lead to absenteeism

Findings from Puntland help to explain why even though teachers are generally dissatisfied with the amount that they receive, salary is not a key factor in teacher attendance. Factors such as commitment toward the community and the country provide teachers with intrinsic motivation, which helps them to carry out their duties with a sense of accountability.

"This profession does not earn you enough financially, but you are developing and educating humans. For instance, I often teach students from zero and watch them progress through the ranks. Once you notice them advance their education level to the higher level, it gives you massive pride and satisfaction, realizing that I had contributed to their development".

- Teacher, urban primary school, Nugaal region, Puntland, Somalia

2.4.4. Teacher workload, recruitment and allocation

Heavy teacher workload, comprised of both classroom- and non-classroom-related tasks, is strongly associated with absence from the classroom and reduced time on task (see Annex 9). With regard to non-classroom-related tasks, teachers in selected schools reported not attending lessons while at school and spending less (than the originally planned) time on teaching due to school meetings, requests from school leaders for administrative support, or unplanned visits from various actors, mainly parents. Classroom-related tasks, such as lesson planning and marking, also increase absence from the classroom, with teachers staying in the staffroom to get work done.

Nevertheless, there are important variations in this regard between countries and between types of schools. For instance, teachers in Uganda, who teach for 7.2 hours per day on average, and teachers in Rwanda, who teach for 6.5 hours per day on average, often in double shifts (see Box 7), are spending less time on task than their colleagues in Tanzania, mainland, where teachers are scheduled to teach for 5 hours per day on average.²⁹ Furthermore, across the eight countries, teachers in rural schools and in public schools are more likely to report missing classes or reducing the length of their lessons as a result of a heavy workload compared with teachers in urban schools and in private schools.

Box 7. The impact of the double-shift system in Rwandan public primary schools

As part of the universalization of basic education in Rwanda, public school teachers were required to undertake 'double shifting' – whereby teachers have a cohort of students in the morning and another cohort of students in the afternoon (Ministry of Education, 2008). Literature and qualitative results from this study show that Rwandan public school teachers have a very high workload, negatively affecting their motivation overall (most private school teachers typically do not double shift). Additionally, teachers were sometimes reported to be late to the second shift, for example, due to having left the school grounds for lunch.

The Ministry of Education is planning to slowly eliminate double shifting, which illustrates a step toward improving the working lives of teachers and, in turn, the quality of education that students receive. According to respondents, the current system not only increases teacher workload, but it directly decreases teaching time and negatively affects the quality of education.

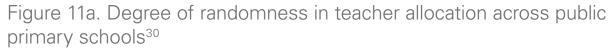
"Adopting the double shift reduced the number of contact hours pupils get face to face with their teachers, because whereas the minimum recommended is 900 hours per year, due to the double-shift strategy the maximum we could have was 780 hours per year. That affected the quality of education, because primary pupils were not getting the minimum yearly hours required with their teachers. This year we began eliminating the strategy, starting with P6 ... Gradually we would like to phase it out before 2023, and doing so requires the expansion of the infrastructure."

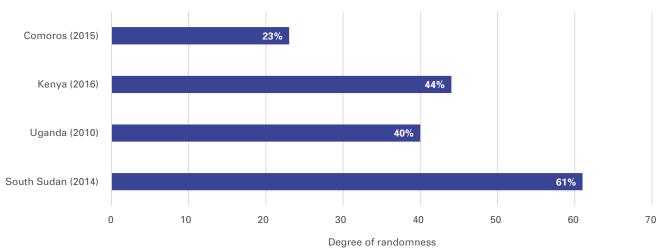
- Ministry of Education official, Kigali, Rwanda

"When a teacher has 70 pupils to teach in the morning shift and another 70 pupils in the evening, it may discourage a teacher. The teacher will teach those of the morning shift well and neglect those of the afternoon; he just gives them homework because he/she is tired".

- District education officer, Eastern Province, Rwanda

These findings suggest that teacher workload and its impact on absenteeism should be analysed against the background of teacher shortages and student-teacher ratios (STRs) and how these vary between countries and, within countries, across schools. While some countries have lower teacher shortages (average STRs) than others, in many countries of the region, teachers are inequitably distributed across schools (see Figure 11a). This translates into significant disparities in class size and schooling conditions, generally to the detriment of the students in rural schools. Inequity in teacher allocation is also gendered, with fewer female teachers serving in rural areas, fuelling disparities – in access and completion – against girls.





Source: Data from national education management information systems and International Institute for Educational Planning-Pôle de Dakar (United Nations Educational, Scientific and Cultural Organization [UNESCO]). Note: The degree of randomness is an indicator capturing the disparities in teacher allocation across schools. It is calculated as 1-R², where R² is the coefficient of determination (level of association) between the number of teachers and the number of pupils per school. The closer the degree of randomness (which ranges from 0 to 100%) is to 0, the more equitable teacher allocation across schools is from the standpoint to provide similar number of teachers to schools with similar number of students. As 'equitable allocation' refers to situations where the number of teachers allocated to a school is proportional to the number of students in that school, a lower value for this indicator suggests that, generally, the country is making the allocation of teachers in public primary schools more equitable according to the number of students in each school. This means that schools with the same number of students have a comparable number of teachers, addressing issues of (in)equity in learning conditions across schools. (For more details, see: Global Partnership for Education, Results Framework Indicators: Methodological briefs, June 2017. Available at: https://www.globalpartnership.org/sites/default/files/document/file/2019-10-gperesults-framework_technical-guidelines.pdf, accessed 17 February 2020.)

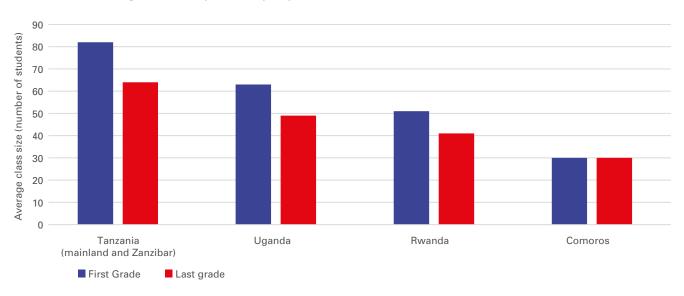
Teachers are also inequitably distributed across grades within schools, with fewer (and usually less-experienced) teachers allocated to early-grade classes, leading to larger class sizes than in later grades (see Figure 11b).³¹ Such teacher allocation policies are counterproductive in terms of equity, as disparities in learning outcomes start in the early grades and have a tendency to widen further during the later grades, i.e. children lagging behind during the early grades rarely catch up during the following grades and, in fact, the disparities usually increase even further (the 'Matthew Effect').³²

³⁰ Only countries for which data were available are included in the graph.

³¹ International Institute for Educational Planning-Pôle de Dakar (United Nations Educational, Scientific and Cultural Organization), 'Teacher Allocation and Utilization in Africa', Working Paper, IIEP-Pôle de Dakar, May 2016.

³² Crouch, Luis, presentation given at the UNICEF West and Central Africa Regional Education Network meeting, 2014. The 'Matthew Effect' (a term coined by Keith Stanovich) describes processes whereby inequality is created or maintained. In learning terms, students at the end of Grade 1 with advanced reading and numeracy abilities begin a pattern of outperforming learners who cannot read or count well. With time, this gap widens.

Figure 11b. Differences in average class size (number of students) between first and last grade of primary cycle³³



Source: Latest available data from national education management information systems and International Institute for Educational Planning-Pôle de Dakar (UNESCO).

Weak teacher recruitment, allocation and transfer policies, the lack of enforcement of recruitment and allocation rules and ineffective collaboration between levels of authority were frequently cited by respondents as factors underpinning inequitable teacher dispersal and high teacher workload in the region, which encourage various forms of absenteeism. Respondents in all countries were of the opinion that teacher recruitment is poorly managed and in certain cases argued that teachers are selected due to political reasons rather than their qualifications. In settings like the Comoros and Zanzibar, where the identification of teacher requirements is carried out at the school level (by head teachers) while the recruitment of teachers is decided at the central level, respondents stressed that aligning responses to demand is challenging, and that many vacancies remain unfilled as a result.

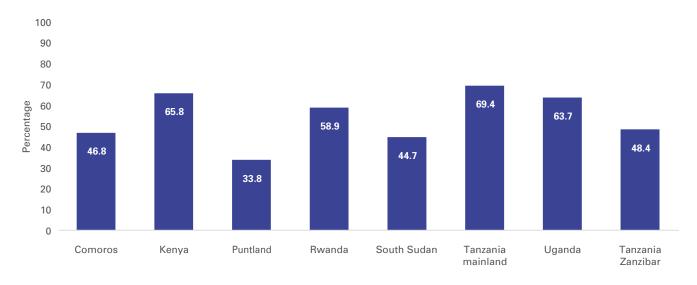
2.4.5. School resources and infrastructure

To meet the increasing numbers of admitted students, most governments have invested heavily in improving school infrastructure. While tremendous progress has been observed over the past two decades, important challenges remain. Many schools still have an overwhelming need for additional classrooms and crucial infrastructure such as laboratories, libraries and dormitories, as well as books, teacher guides and teaching aids.

Also, across the eight countries, only 55 per cent of teachers believe that they have the teaching and learning materials (TLMs) they need to teach, but important variations exist between countries (see Figure 12). There are also significant variations in this regard between teachers in rural and urban schools (51 per cent vs 60 per cent), and between those in public and private schools (54 per cent vs 60 per cent). Public schools in marginalized and remote areas are the most badly hit, as they face the biggest investment needs and the longest delays in receiving grants to purchase teaching materials. Private schools tend to be better equipped, primarily due to the increased capacity of parents to overcome infrastructural challenges and provide critical TLMs.

33 Only countries for which data were available are included in the graph.

Figure 12. Percentage of teachers who agreed or strongly agreed with the statement 'Most teachers at this school have the teaching materials they need to teach', by country/territory



Inadequate school infrastructure and limited TLMs are associated with classroom absenteeism and reduced time on task. On average, teachers who have adequate access to TLMs are 2.6 times less likely to be frequently absent from the classroom and 2.3 times less likely to reduce their time on task than teachers with insufficient access to TLMs (see Annex 9).

2.5. Non-system factors affecting teacher attendance

2.5.1. Health

Across the eight countries, ill health is the most frequent reason given by teachers for explaining absence from school (62 per cent) and late arrival/early departure (53 per cent) and the second most frequent reason given for being absent from the classroom (51 per cent) (see Annex 8). The correlational analysis of survey data also shows that teacher health is highly associated with reduced time on task: teachers who cited health as a reason for absenteeism were 1.3 times more likely to spend less time teaching (while in the classroom) than teachers who did not provide the same response (see Annex 9).

Health-induced absenteeism appears to be gendered, as more female than male teachers cited ill health as a reason for low school and classroom attendance and reduced time on task. The frequency of health-related absences also varies between different types of school, as more teachers in rural schools than in urban schools reported being absent from the classroom and spending reduced time on task due to health issues.

Interviews with selected respondents in all countries confirmed that teachers serving in rural and remote areas are more prone to health-related absenteeism, because they must travel further to access adequate health care. Teachers often described health-related absences as 'valid', 'natural', 'justifiable', and 'legitimate', which may explain their greater willingness to report these absences in the first place. Among the conditions affecting teacher school attendance – especially in areas with limited access to clean water – are diarrhoeal

disease, cholera and typhoid fever. Throughout the eight countries, however, it was malaria and HIV/AIDS that respondents more frequently associated with chronic teacher school absences. Further determinants of school absenteeism reported in all countries include alcohol and drug addiction (primarily to cannabis and *miraa*). Low classroom attendance and reduced time on task, however, were most often attributed to effects on health such as dizziness, heat exhaustion, and heatstroke, mainly induced by exposure to extreme heat. These seem to occur more frequently in arid and semi-arid areas, to primarily affect non-local teachers, and to increase in magnitude when combined with poor school infrastructure.

2.5.2. Family obligations

A large percentage of surveyed teachers cited family reasons as a major contributor to low school attendance (35 per cent) and lack of punctuality (32 per cent). 'Family reasons' is a broad category that captures caring for family members (e.g. when a child or other family member falls ill) and attending family events such as weddings and funerals. However, teachers in rural schools seem to be more adversely affected than teachers in urban schools.

Survey data also indicate that teachers who are distracted due to family obligations are 1.45 times more likely to reduce the time they spend teaching (while in the classroom) than teachers who did not face this type of challenges (see Annex 9).

2.5.3. Weather

In all countries, surveyed teachers cited weather (primarily heavy rain and excessive heat) as an important reason for school absence (27 per cent) and late arrival (39 per cent) (see Annex 8). However, teachers in rural schools were more likely than urban school teachers to offer weather as a reason for missing school (32 per cent vs 21 per cent) or for arriving to school late (42 per cent vs 35 per cent). Differences between public and private school teachers are significant only with respect to late arrival (40 per cent vs 33 per cent).

Weather is also highly associated with teachers cancelling classes and shortening lessons. Teachers who offered weather as a reason for absenteeism were 1.4 times more likely to be absent from the classroom and 1.4 times more likely to spend less time on task (while in the classroom) than teachers who did not consider weather as a factor contributing to absenteeism (see Annex 9). School infrastructure is critical for understanding weather-induced absenteeism. Interviewed teachers in Puntland and northern Kenya explained that they often miss lessons when the temperature rises above 40 degrees Celsius and it becomes too hot for teaching and learning to take place in open-air classrooms. In Uganda and Rwanda, where schools often have iron-sheet roofs, classroom absenteeism due to heavy rainfall was justified on the basis that the noise is so loud that it is impossible for teachers to continue teaching. Under these conditions, even when lessons take place as scheduled, the amount of time teachers spend on task is often reduced.

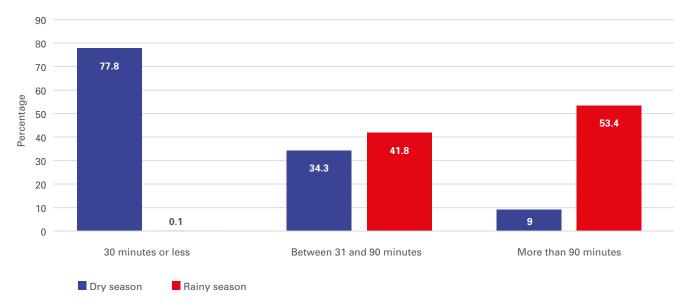
2.5.4. Community infrastructure

Poor transportation networks and services are another common reason that teachers offered for missing school (19 per cent) and arriving to school late (22 per cent) (see Annex 8). Teachers serving in rural schools and communities, where transportation and road networks are undeveloped and thinly spread, were more likely than teachers working in or close to towns and cities to cite the absence of critical community infrastructure as a factor affecting their school attendance (16 per cent vs 9 per cent) and punctuality (24 per cent vs 20 per cent). Also, interestingly, male teachers were more likely than female teachers to cite transportation as a reason for being absent from school (17 per cent vs 10 per cent).

The location of the teacher's home residence and the distance to work are also highly associated with teachers' capacity to report to school without fail and on time. Teachers who cited distance to school as a reason for absenteeism were 1.5 times more likely to be absent from school and 2.8 times more likely to arrive to school late or leave school early than teachers who did not report distance to school as a reason for being absent (see Annex 9).

In certain instances, surveyed teachers reported requiring more than 90 minutes to reach school, though travel time increases significantly during the rainy season, irrespective of mode of transport (see Figure 13). Teachers who need more than 90 minutes to arrive to school are much more likely to report high rates of absenteeism compared with their colleagues who need 30 minutes or less to reach school (20 per cent vs 15 per cent). Teachers with the longest travel time are also more likely than those with the shortest travel time to report being late to their duties (23 per cent vs 15 per cent) and to report reducing their time on task (21 per cent vs 15 per cent).

Figure 13. The amount of time teachers need to reach school during the rainy and dry seasons (by percentage of teachers)



2.5.5. Conflict

Some of the schools visited during the implementation of the TTT study (mostly those in South Sudan and northern Kenya) had seen many of their teachers flee from political or ethnic violence. Interviewed teachers and head teachers in these schools confirmed that lack of security is a major driver of teacher school absenteeism and desertion. According to respondents, the threat of violence also affects educators' capacity to teach the required hours and up to proper standards, as it interferes with their sense of duty and reduces their intrinsic motivation to teach. And the students' fragile mental state and difficulty following the lesso (primarily due to post-traumatic stress disorder) further restricts the teacher's commitment to spending sufficient time on task.



3. Promising practices and potential recommendations for policymaking

The TTT study has highlighted important determinants of teacher attendance and time on task in the eight ESA countries and territories covered. This section considers implications of key findings for teacher policies and programmes aimed at curbing absenteeism. Insights from the field on promising practices – i.e. interventions by governments and development partners that may have the potential to bring about positive change and sustainably improve teacher attendance and time on task – are also discussed here. The section concludes with a small set of recommendations for further research.

3.1. Teacher monitoring

In most countries, there exists a framework for reporting, monitoring and sanctioning teacher absenteeism, especially absence from school, but its implementation is often problematic due to lack of capacity and resources. To encourage consistent enforcement of teacher monitoring and management mechanisms, it is important to:

* Ensure that all head teachers in public and private schools have access to training courses and tools on school leadership and teacher management. This includes teacher monitoring and oversight, curriculum implementation and supervision, instructional leadership and resource mobilization. Making this training a prerequisite for recruitment or promotion to principalship (along with other objectives and clearly defined criteria) is also important for ensuring that teacher management is enhanced in every educational institution. This could lead to better teacher productivity, retention, motivation and attendance. Kenya could potentially be an inspiration for other countries in this regard (see Box 8).

Box 8. Promising practice: How Kenya is strengthening the monitoring and leadership capacities of head teachers

The Kenya Education Management Institute offers a wide range of on-site and online training courses to school principals in order to improve their monitoring and management capacities. As a policy initiative, the Teacher Service Commission requires school managers to attend at least two development courses annually and these courses are deemed a prerequisite for promotion to principalship.

* Increase the frequency of school inspections, especially in rural and remote areas. This could be achieved by developing (in partnership with sub-national education offices) a system for determining which offices may require additional staff and more funds for transportation to complete more frequent inspections. Such a system would take into account the number of schools/teachers served, miles travelled, availability of public transportation and other contextual specificities, including climatic conditions and political instability.

Photo: @UNICEF/UN0234449/ Noorani

* Boost parental and community involvement, especially at low-income and rural public schools, as a way of improving teacher accountability and attendance. As a first step, this involves institutionalizing the monitoring role of parents and community groups and strengthening their representation on school councils and management boards. Raising awareness and building the capacity of community actors is also necessary to increase their ability and motivation to monitor teacher behaviour. However, for community engagement programmes to increase teacher performance and attendance, experience in community organization and teacher buy-in are important prerequisites.³⁴

Box 9. Promising practices in monitoring in Puntland and the Comoros

Upgrading the monitoring role of Community Education Committees in Puntland

Puntland has recognized the important role that Community Education Committees (CECs) can play in supporting and monitoring the quality of learning in schools located in their districts. Puntland is working towards enhancing the capacity of CECs to ensure that they can provide consistent and enhanced support to schools, particularly in monitoring teacher absenteeism. This is an important measure as teachers in Puntland often value the role that CECs play at their schools, and exhibit a stronger commitment toward their teaching responsibilities when they feel that the community cares and keeps track of their efforts.

- "The truth is that, today, the majority of the schools are in the hands of the community. They provide awareness programmes for the students to encourage them to come to school. They also take part in school meetings and hold the head teacher and teachers accountable for their duties. They even have the authority to replace missing, or frequently absent, teachers".
- Sub-national education officer, Bari region, Puntland, Somalia

Encouraging the engagement of students' mothers in the Comoros

At the large majority of schools in the Comoros, head teachers and teachers alike explained that women are more active than men in activities such as parent-teacher meetings. A sub-national education officer mentioned that at some schools, in partnership with a non-governmental organization called Maeecha, women arrive at school 10 minutes before lessons commence and then verify if there are any students or teachers missing. If there are, they are able to immediately report this to the school administration and are able to take up any recurring issues with the school council. Practices such as this, which leverage the positive role that mothers play in school life, could be encouraged at other schools.

- "One school put into place a system to reduce student absenteeism. Parents specifically, mothers arrive 10 minutes after school arrives to see if there are missing students and also, if there are absent teachers, they complain directly to the school administration. If they see that there is a teacher who is often absent, they could convoke a meeting with the school council."
- Sub-national education officer, rural public school, Ndzuani, the Comoros

- Improve system coherence and ensure that all actors engaged in teacher monitoring are aware of their roles and core responsibilities and understand how these are shared between levels of authority. This is especially important within the context of education decentralization and overlapping institutional structures and could be achieved by developing (or updating) manuals with detailed information and examples on each actor's role in monitoring, reporting and sanctioning teacher absences. Such manuals are a way of setting boundaries and clarifying what each actor should and should not do, thus ensuring system coherence. However, to be effective, manuals should be accessible and their content easy to learn, and they should include reference checklists. Senior education staff can help to communicate this information verbally in face-to-face meetings wherever possible, to ensure that all relevant stakeholders (e.g. school inspectors, school councils, school leaders) fully appreciate and are able to exercise their unique role. This definition of responsibilities is one of the key policy strategies to improve teacher monitoring. Establishing an accountability framework of actors involved in teacher monitoring and sanctioning - and ensuring that the delegation of these tasks is coherent with financing, information and incentives provided to decentralized actors - is also critical. Actors involved in monitoring can only make a difference if they have the autonomy and support to make significant decisions and if their responsibilities are well defined and accepted by teachers
- * Explore the use of technology in ensuring high levels of teacher school attendance. Implementing a technology-based intervention, such as installing cameras in classrooms or biometric fingerprint devices in schools, is increasingly seen as a way to ensure that teachers adhere to attendance rules (see Box 10). However, there is empirical evidence to suggest that technology-driven interventions may not work and may even result in lower attendance or substantial negative spill-over effects, including decreased job satisfaction, reduced effort, and difficulty in filling vacancies in monitored workspaces. Caution is therefore needed when government organizations develop and implement such programmes. A good technology-based intervention is expected to be contextual, clear and concise, and should be created through a consultative process that involves teachers so that they can express any immediate concerns.

Box 10. Promising practice: Fingerprint recognition pilot for monitoring teacher absence from school in Rwanda

An urban public school in Kigali Province, Rwanda, has recently implemented a biometric fingerprint recognition system, and the head teacher explained that absences and punctuality are evaluated at the end of each week. Previously, the school used a physical attendance booklet, as is still the case for the majority of the schools in Rwanda. One teacher noted the change that the fingerprint sign-in has brought, "Before we used to sign in attendance book and, as you know, someone can come late, sign and put incorrect information. But now it is no longer possible."

Although this was the only school in the study using such technology, sub-national actors across Rwanda spoke positively of it.

"As you know, there is the technology of using fingerprints, and I wish every school would have that system. It would facilitate follow-up on teacher absenteeism ... the information we get with the manual report cannot be 100 per cent reliable".

But objections to this intervention have been raised by teachers and others, who question attempts to solve accountability problems via observation and control.

- District education officer, Northern Province, Rwanda

Banerjee, Abhijit V., Rachel Glennerster and Esther Duflo, 'Putting a Band-aid on a Corpse: Incentives for nurses in the Indian public health care system', *Journal of the European Economic Association*, vol. 6, nos. 2–3, 2008, pp. 487–500; Dhaliwal, Iqbal, and Rema Hanna, 'Deal with the Devil: The successes and limitations of bureaucratic reform in India', NBER Working Paper no. 20482, National Bureau of Economic Research, September 2014.

* Intensify efforts to address multiple forms of teacher absenteeism. Few countries have developed frameworks for systematically monitoring forms of absenteeism other than school absence. Typical ways of monitoring teacher punctuality, classroom presence and time on task include random classroom checks by head teachers and checking lesson plans against student notebooks (to ensure that what was prepared was actually taught). However, these are often ineffective due to insufficient resources and capacity. It is therefore important that policymakers expand their notion of absenteeism and that practices and measures designed to address the phenomenon move beyond the narrow focus on monitoring only teacher school absences, to instead include additional forms of absenteeism that affect teacher time on task. While not free of limitations, the Teacher Performance Appraisal and Development (TPAD) tool that was recently introduced in Kenya could serve as a good starting point for the development of comprehensive teacher attendance monitoring frameworks (see Box 11).

Box 11. Promising practice: Monitoring multiple forms of teacher attendance in Kenya

The Teacher Performance Appraisal and Development (TPAD) tool was introduced by Kenya's Teacher Service Commission in 2016, in order to systematically monitor teachers' school and classroom attendance, time on task (through syllabus coverage), classroom performance, and discipline. Teachers, head teachers and students (class prefects) are requested to record this information, which is then uploaded to the online TPAD system.

Discussions with education stakeholders in Kenya revealed a consensus on the initiative's effectiveness. Head teachers in most schools reported a decrease in teachers' school and classroom absences and an increase in the time teachers spend on teaching, citing TPAD as the main underlying cause. One of them described how TPAD increases teachers' effort.

"TPAD is now monitoring teachers. By the end of the term, teachers report the lessons they have been teaching, the number of days they have been absent, and students sign a form to confirm classroom attendance – it reflects everything. So, every teacher is now avoiding being absent."

- Head teacher, public school, Nairobi, Kenya

However, interviewed teachers repeatedly expressed their frustration over how cumbersome and time-consuming it is to collect and upload TPAD data, and stressed that the tool does little to motivate teachers. In fact, in remote settings, where teachers have to travel long distances to access internet facilities and upload their data, TPAD usage may even contribute to increased absences from school and the classroom and reduced time on task. Having recognized these limitations, the Teacher Service Commission is currently working on simplifying implementation and creating a user-friendly portal for capturing teacher data.

3.2. Teacher training

Some countries, such as the United Republic of Tanzania (mainland and Zanzibar) and Kenya, have made considerable progress in ensuring that the majority of primary school teachers have received some form of professional training; that teachers are given some opportunities to attend competence-enhancing workshops, and that teachers are motivated to acquire professional skills by linking these skills to career progression. Yet, other countries are lagging behind. Furthermore, in all of the countries, challenges related to the relevance, frequency and delivery of teacher training still persist, affecting teacher school and classroom attendance, as well as quality time on task. To ensure that teachers are provided with the tools they need before entering the classroom, it is potentially necessary to:

- * Reform the pre-service teacher training model and curriculum to ensure that it is in tandem with the school curriculum and children's needs and that it contains a strong practical component that includes teaching practice in schools and extensive practice in competency-based learning. This should ensure teachers are well equipped to transition to, and perform effectively in, the classroom.
- * Provide continuous and high-quality in-service training and ensure that all teachers have an equal chance of being selected to attend professional development courses. It is also important that teachers receive training that is relevant to the grade in which they are teaching, and that training is pertinent to their subject specialization. In countries and territories such as the Comoros, South Sudan and Puntland, where many active teachers are unqualified or underqualified, the focus of in-service training should be on ensuring that all teaching staff upgrade their competencies to the required certification.
- * Ensure that in-service training does not conflict with classroom hours, as it is difficult for teachers to make up for missed lessons and achieve effective curriculum implementation. Government ministries, agencies and non-governmental organizations undertaking educational tasks that require teacher participation should schedule these for weekends and school holidays, so as not to encourage teacher school and classroom absences. Kenya has recently implemented such an initiative with positive results (see Box 12). Ensuring that enough substitute teachers are available to cover teachers in training (during school days) is a way to safeguard both curriculum implementation and teachers' work-life balance.

Box 12. Promising practice: How Kenya managed to reduce school absenteeism due to in-service training

In 2017, the Teacher Service Commission issued a circular ordering all teacher professional development training to take place during weekends and school holidays. Interviews with Kenyan stakeholders confirmed that the circular is currently implemented in most counties and that it has encouraged school attendance, despite initial opposition from teacher unions.

3.3. Teacher remuneration and career progression

Pay is commonly seen as a critical factor for improving teacher motivation and attendance and governments in the ESA region have recently experimented with different ways of improving teacher compensation packages: some have introduced performance pay, some have approved base salary increases, and others have developed detailed material rewards and incentives frameworks (see Box 13). And yet, TTT survey data show that teachers in the region are still massively dissatisfied with their pay, which they consider inadequate to cover their basic needs.

While teacher dissatisfaction is indisputably linked with inefficiencies in the design and implementation of national remuneration policies (*see Box 13*), the TTT study did not uncover a consistent correlation between teacher salary and attendance.³⁶

Instead, what emerged clearly from the analysis is a strong positive association between teacher attendance and the timing and modality of teacher pay.³⁷ In most countries, teachers who receive their salary on time are more likely to be punctual in their duties, present at school and in the classroom, and spend more time on teaching. Teachers who do not face significant difficulties in receiving pay, like having to travel a long distance to find a bank, also tend to be more punctual and less frequently absent from school.

In light of these findings, it is potentially useful to:

- * Ensure the timely payment of salaries and remove obstacles to receiving pay. This could be achieved by increasing pay points, especially in remote areas where teachers often have to travel for days to collect their salary. Establishing a rota system at the school level, to at least ensure that schools do not close around pay collection time, is another option. In areas with adequate internet access, alternatives such as mobile banking can also be considered. The experience of Kenya and the United Republic of Tanzania with mobile services (which allow users to deposit, withdraw and transfer money, and pay for goods and services with their mobile phone) could offer important insights into mobile solutions.
- * Consider boosting other important components of teacher motivation, such as by establishing a clear career progression path for the teaching profession. This involves clarifying objective promotion criteria beyond seniority or age and linking salary scales to training, experience and performance. Teachers should also be allowed to progress through different salary scales as legally stipulated and not stagnate in the same scale for too many years due to the limited availability of posts for those eligible for promotion.
- * Ensure that salary reforms are well designed to avoid the risk of salary increases being inefficient or adversely affecting teacher motivation. This includes taking into consideration not only national income levels (GDP per capita) and average salaries of professions requiring similar qualifications, skills and responsibilities, but also the rising living standards in most of the ESA region.
- * Clearly define criteria for measuring teaching effectiveness when linking teacher performance to bonuses or higher salaries. Having strong monitoring and evaluation mechanisms and sufficient teacher buy-in are two additional important prerequisites for the success of performance pay programmes.

³⁶ Teacher salary is positively and significantly associated with absenteeism only in Zanzibar and South Sudan, and with insufficient teaching quality only in Rwanda and Puntland. Volunteer teachers (the least well paid) are also, on average, significantly more frequently absent across the region.

³⁷ On average, teachers who answered 'receiving [the] pay' as a reason for being absent were 1.9 times more likely to report high frequency of late arrival/early departure (and 1.6 times more likely to report high frequency of absence from school) than teachers who did not answer 'receiving [the] pay' (see Annex 9, Table 1).

* Provide material rewards and incentives that do not encourage additional side work and do not distract teachers from their teaching duties. Emphasis could be shifted, for example, from rewarding best-performing teachers with cows or small-scale business loans to providing sufficient transportation and housing allowances to teachers who struggle with remoteness and transportation. Making transportation and housing stipends conditional upon school attendance and punctuality would more directly reduce teacher absence and lateness.

Box 13. Promising practices (and their limitations) in incentivizing teachers

Rwanda: Performance contracts and horizontal promotion

The Rwandan Ministry of Education has recently introduced policies on bonuses and promotion in order to increase teacher salaries in all schools. Annually, teachers may receive a 3 or 5 per cent bonus on top of their salary, depending on whether their performance is evaluated at 70 or 80 per cent respectively. After three years of performance at 70 or 80 per cent, teachers can see their salary increase permanently by a certain percentage, which is known as 'horizontal promotion'. Most head teachers welcomed these recently implemented policy changes, and national and sub-national officials viewed them as successful. Teachers, however, have mixed opinions regarding the clarity of the criteria head teachers use to evaluate their performance and felt that these policies have failed to materialize.

A teacher from a rural public school in the Southern Province argued: "Horizontal promotion has created conflict among teachers ... After the evaluation of teachers, those who got 70 per cent wonder why the other one that got 80 per cent when they feel he/she was not any better. Also, it becomes clear that when the head teacher is not happy with the teacher, then they evaluate them at 60 per cent repeatedly and this becomes a reason to fire them". This highlights the need to better clarify how teacher effectiveness is measured and specify what aspects of effectiveness influence the different components of teacher salary.

Rwanda: Monetary and non-monetary incentives for teachers

The Ministry of Education has also introduced a microfinancing scheme for teachers, which is meant to lift teachers out of poverty, allow them to purchase houses, and increase their motivation and attendance. However, stakeholders at various levels – including teachers and national-level respondents – criticized loans which are intended for conducting small-scale business, stating that they have actually detracted from teachers' primary duties or led teachers to abandon their teaching career altogether, pointing to either short- or long-term absenteeism. Respondents also mentioned that each year, certain teachers are selected as 'best teacher' at the sector and district levels, and as a reward, the teachers each receive a cow. This incentive is part of a broader One Cow per Teacher programme, initiated by the Rwanda Education Board, which has been criticized for distracting teachers and encouraging various forms of absenteeism, including school absence and lateness.

Kenya, the United Republic of Tanzania (mainland and Zanzibar): Salary increases

Recent salary increases in Kenya, the United Republic of Tanzania mainland and Zanzibar are considered by national-level respondents as beneficial for all teachers and an important step toward improving attendance. However, interviews conducted in Zanzibar and the United Republic of Tanzania mainland show that not all teachers have benefited from a salary increase, pointing toward incomplete implementation. Interview data from Kenya also suggest that the new teacher salary scheme has primarily benefited school administrators and senior teachers, rather than early-grade teachers, who usually handle bigger class sizes and continue to feel demotivated.

South Sudan: Salary supplementation

Since 2017, the European Union-funded Impact project has been offering US\$40 per month to public school teachers in South Sudan, aiming to increase the attendance of 30,000 teachers across the country, improve standards of teaching and encourage the teaching profession. Awareness of the project was very high among interviewed teachers, many of whom name this programme as motivating them to not be absent from school. An education official also argued, "If it wasn't for Impact, there would be no schools now running in the whole south. These funds have really solved the problem." Respondents also expressed concerns over the sustainability of the project, however.

3.4. Teacher workload, recruitment and allocation

In all countries, urban schools are better staffed than rural schools, and fewer and less qualified teachers teach in the early grades (giving them the highest STRs) whereas, ideally, the most talented teachers should be deployed to the most deprived areas and schools, and the early grades should have the lowest STRs.³⁸ Addressing the inequitable distribution of teachers, which would also reduce teacher workload and improve teacher attendance, requires solving teacher recruitment and allocation challenges. To this end, countries in the region may want to:

- * Develop incentive strategies to make postings in rural and hardship areas more attractive. This includes gender-specific incentives to encourage a female presence to work in rural areas.
- * Strengthen the enforcement of teacher allocation rules. Although teacher allocation rules exist in most countries, there is usually a gap between the number of teachers a school is due to receive and what happens in reality on the ground. Overcoming this challenge involves strengthening institutional capacities and also reinforcing the organizational framework between the national and sub-national levels of authority. Establishing tools to automate the allocation of teachers is another strategy that governments in the region may want to consider.
- * Consider decentralizing teacher deployment and allocation. Centralized deployment and forced allocation may deter graduates from joining teaching. Therefore, localized hiring and posting may be a more efficient way to attract talent, especially female talent. Recruiting locally also encourages retention, as it increases individual teachers' satisfaction with their geographic placement and reduces the cost to teachers of being present in their assigned communities (see Box 14).

³⁸ Bashir, Sajitha, et al., Facing Forward: Schooling for learning in Africa, Overview booklet, World Bank, Washington, D.C., 2018.

Box 14. Promising practice: How Zanzibar is slowly moving away from centralized teacher recruitment and allocation

The Ministry of Education and Vocational Training in Zanzibar has recently moved from making general calls for teachers to fill positions to advertising specific posts at named locations. Teachers responding to these advertisements are more likely to have job satisfaction if successful, as they will work in locations of their own choice. In some instances, the government also constructs and provides subsidized housing for teachers.

3.5. Potential solutions to external challenges

Strengthening inter-sectoral collaboration and working in strategic partnership with line ministries, development partners, non-governmental organizations, communities, parents, and other stakeholders is potentially crucial for overcoming challenges external to national education systems that affect teacher attendance and time on task. As such, countries in the region may want to consider that:

* Collaboration between ministries of education, ministries of public works and transport, and local government is especially important, as poor infrastructure in the community limits teachers' ability to carry out their duties. Special attention needs to be given to providing reliable transportation and functioning roads to improve teacher school attendance and discourage lateness. Ensuring decent housing conditions for teachers is also key for staffing schools in areas where housing options are limited or rental costs too high (see Box 15). Working in collaboration with parents and local communities on reinforcing school infrastructure (e.g. by replacing iron-sheet roofs) could help to reduce weather-induced classroom absenteeism and increase time on task.

Box 15. Promising practice: Inter-ministerial collaboration for housing teachers in Rwanda

In 2013, the Rwandan Ministry of Education, in partnership with the Ministry of Local Government, commenced a project to construct houses for teachers. Since the inception of the project, and despite delays caused by funding woes, more than 400 houses have been built in Kigali and other cities and towns. In a recent teacher development and management policy, the Ministry of Education laid out its plans to build additional houses, two per sector, each with the capacity to accommodate eight teachers (four male and four female).

Teachers in both rural and urban areas mentioned that teacher accommodation does exist at their school and welcomed the initiative. However, teachers also often noted that there is not enough housing for all teachers, or that housing can only accommodate single teachers rather than families.

"Teacher housing is very important. If teachers have houses, they are more secure. Teachers who cannot pay rent cannot teach as required. If the teacher housing problem is solved, it will be a big achievement to schools. But the ministry needs to build houses for married teachers too, and not only consider single teachers."

- Teacher, public school, Kigali, Rwanda

- * Working in partnership with ministries of health is crucial for addressing inadequate health care and prevention programmes that affect teacher time on task. While malaria and HIV/AIDS are common causes of poor health among teachers in this study, their occurrence varies across districts and schools and therefore they require a needs-based approach. This involves working with development partners on establishing or scaling up school-based health programmes that are locally owned and incorporate some form of community involvement (to ensure sustainability). In areas affected by conflict, education and health ministries could work together to provide counselling services to teachers.
- * In countries facing security concerns, ministries of education could strengthen cooperation with police and security forces, civil society organizations, and local communities to increase the number of guards stationed at schools. Guards and escorts, who accompany teachers to and from school, have been used to encourage teacher school attendance in many conflict-affected settings with some success.³⁹ Ministries of education could also work with line ministries and development partners to improve school safety infrastructure, including by building boundary walls and installing safety and security equipment. However, it is important that efforts to strengthen school security do not 'militarize' schools or give them an intimidating appearance, as this could further reduce teacher attendance.⁴⁰

3.6. Recommendations for further research

Drawing from an extensive set of data, the TTT study has identified a number of (system and non-system) factors that affect primary school teacher attendance and time on task in eight ESA countries and territories and has highlighted promising practices for sustainably reducing absenteeism in these settings. While this is an important first step, the study also had some limitations and more exploratory research is needed in order to fully comprehend the complexity of manifestations, determinants and consequences of teacher absenteeism in varying national and sociocultural contexts.

Promising avenues for further research, which governments, development partners and researchers may consider, include the following:

- Strengthening the existing evidence base on the links between teacher absenteeism and student learning outcomes. As a first step, this involves measuring learning more systematically and filling related data gaps (see Annex 1, Figure 1, which shows that sub-Saharan Africa is the region with the most significant data gaps in measuring learning poverty). Making progress in accurately measuring teacher absenteeism is also crucial for investigating the links between absenteeism and learning.
- Investing in more gendered analyses of absenteeism. This includes further exploring factors contributing to differences between female and male teacher absenteeism and how these vary between sociocultural and socio-economic contexts; strengthening the evidence base on the links between female teacher absenteeism and girls' education outcomes (e.g. attendance, completion and learning); and further investigating the role of students' mothers in teacher monitoring and attendance.

³⁹ Global Coalition to Protect Education from Attack, What Schools Can Do to Protect Education from Attack and Military Use, GCPEA, New York, 2016.

⁴⁰ Ibid.

- Expanding research on teacher attendance at faith-based schools, among special needs teachers and for teachers serving refugee and nomadic populations.⁴¹ This is crucial for appreciating the unique challenges these teachers face and for better understanding the idiosyncratic factors that may affect their attendance. Filling this knowledge gap is important for ensuring quality inclusive education, which is recognized as a strategic priority in most ESA countries.
- Expanding research on teacher attendance and time on task to other education levels. With preprimary increasingly recognized as a priority for children to acquire the foundational skills needed for the rest of their education and life, and with secondary enrolment rates increasing rapidly across the ESA region, it is crucial that research on teacher motivation and attendance expands to include pre-primary and secondary school teachers.⁴²

⁴¹ This is especially relevant for Puntland where nomadic pastoralists account for 60 per cent of the population. Puntland Ministry of Education and Higher Education, *Puntland Education Sector Strategic Plan (ESSP) 2017–2021*, Puntland Ministry of Education and Higher Education, Garowe, Somalia, 2017.

⁴² With support from Mastercard Foundation, the second phase of the TTT study looks at the attendance of secondary school teachers in three African countries (Rwanda, Ghana and Morocco). In Ghana, pre-primary schools are also included in the study sample. Research findings from these countries will be available in 2021.

References

- Afrobarometer, < www.afrobarometer.org >, accessed 16 February 2020.
- Banerjee, Abhijit V., Rachel Glennerster and Esther Duflo, 'Putting a Band-aid on a Corpse: Incentives for nurses in the Indian public health care system', *Journal of the European Economic Association*, vol. 6, nos. 2–3, 2008, pp. 487–500.
- Barnaba, Boboya J. E., 'Examining the Contemporary Status of an Education System: The case of the Republic of South Sudan', 2015.
- Bashir, Sajitha, et al., Facing Forward: Schooling for learning in Africa, Overview booklet, World Bank, Washington, D.C., 2018.
- Beeharry, Girindre, 'Reducing Learning Poverty through a Country-led Approach', World Bank Blogs, 16 October 2019, https://blogs.worldbank.org/education/reducing-learning-poverty-through-country-led-approach, accessed 16 February 2020.
- Bold, T., et al., 'What Do Teachers Know and Do? Does It Matter? Evidence from primary schools in Africa', Policy Research Working Paper no. 7956, World Bank, Washington, D.C., 2017.
- Crouch, Luis, presentation given at the UNICEF West and Central Africa Regional Education Network meeting, 2014.
- Dhaliwal, Iqbal, and Rema Hanna, 'Deal with the Devil: The successes and limitations of bureaucratic reform in India', NBER Working Paper no. 20482, National Bureau of Economic Research, September 2014.
- Filmer, Deon, 'Education Quality in Sub-Saharan Africa', Presentation slides for the Research on Improving Systems of Education (RISE) Conference, June 2015. Available at: www.riseprogramme.org/files/inline-files/25 Filmer SDI-RISE.pdf>, accessed 16 February 2020.
- Global Coalition to Protect Education from Attack, What Schools Can Do to Protect Education from Attack and Military Use, GCPEA, New York, 2016.
- Global Partnership for Education, Results Framework Indicators: Methodological briefs, June 2017. Available at: www.globalpartnership.org/sites/default/files/document/file/2019-10-gpe-results-framework_technical-guidelines.pdf, accessed 17 February 2020.
- International Institute for Educational Planning-Pôle de Dakar (United Nations Educational, Scientific and Cultural Organization), 'Teacher Allocation and Utilization in Africa', Working Paper, IIEP-Pôle de Dakar, May 2016.
- Martin, Gayle H., and Obert Pimhidzai, *Service Delivery Indicators: Kenya*, World Bank, Washington, D.C., 2013.
- Peel, Francis, 'Improving Africa's School Feeding Programs: Analysis sheds light on strengths, challenges', 9 June 2016, World Bank, https://www.worldbank.org/en/news/feature/2016/06/09/improving-africas-school-feeding-programs-analysis-sheds-light-on-strengths-challenges>, accessed 16 February 2020.

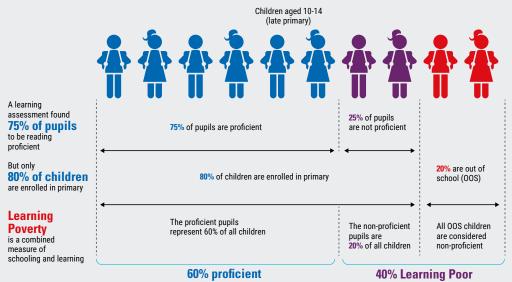
- Price, J., M. Galvis and A. Channa, 'Understanding Teacher Attendance in Kenya: A case study of Embu County', National Foundation for Educational Research, forthcoming.
- Pritchett, Lant, 'Creating Education Systems Coherent for Learning Outcomes: Making the transition from schooling to learning', RISE Working Paper, Research on Improving Systems of Education, December 2015.
- United Nations Children's Fund Office of Research Innocenti, 'Time to Teach', <<u>www.unicef-irc.org/research/time-to-teach</u>>, accessed 16 February 2020.
- World Bank, Data Catalog, 'Service Delivery Indicators', https://datacatalog.worldbank.org/dataset/service-delivery-indicators, accessed 16 February 2020.
- World Bank, Ending Learning Poverty: What will it take?, World Bank, Washington, D.C., 2019.
- World Bank, 'Learning Poverty', <<u>www.worldbank.org/en/topic/education/brief/learning-poverty</u>>, accessed 16 February 2020.
- World Bank. World Development Report 2004: Making services work for poor people Overview, World Bank, Washington, D.C., 2003.
- World Bank, 'Zanzibar Improving Student Prospects Project', Strategic Directions Paper, 2015.

ANNEXES

Annex 1. Learning poverty

Box 1. What is learning poverty?

The Learning Poverty indicator combines the concepts of schooling and learning at the end of primary education, building on indicators of reading proficiency and school enrollment generated in the SDG 4 reporting process. Consider this illustration for a hypothetical country that has gaps in both achievement and attainment:



Learning Poverty is the weighted average of the share of the population below the minimum proficiency level, adjusted by the out-of-school population.

 $LP = [(BMP) \times (1-OOS)] + [1 \times (OOS)]$

where

LP = Learning poverty

BMP = Share of children at the end of primary who read at below the minimum proficiency level, as defined by the Global Alliance to Monitor Learning (GAML) in the context of the SDG 4.1.1 monitoring

OOS = Out-of-school children, as a share of children of primary school age, and in which all OOS are regarded as being below the minimum proficiency level

The learning poverty calculations use data from both cross-national and national large-scale assessments that are judged as being of sufficient quality in terms of design, implementation, comparability, timeliness, frequency, documentation, and access. The goal of "reading by age 10" is an *ideal*: to achieve it, not only should all children be reading proficiently after three full years in primary education, but they should also have entered school at age 6 or 7. By contrast, our actual *measurement* of learning poverty is based on cross-national or national assessments that are administered in Grades 4, 5, or 6 and therefore at ages between 10 and about 14. The Learning Poverty results presented here therefore may be a conservative estimate of the extent of the literacy challenge for in-school children, since many children have been tested well after age 10. For most countries, the out-of-school children indicator is built using Adjusted Net Enrollment Rate (ANER) data for primary school from UIS. In a few cases, where those data are inconsistent with other evidence, household surveys are used to estimate the out-of-school indicator.

Note: To access the data and code to replicate the Learning Poverty indicator, please visit https://github.com/worldbank/LearningPoverty

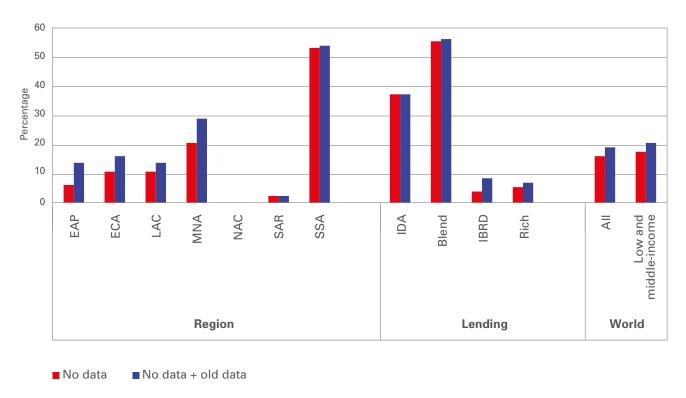
Table 1. Learning poverty by sex and subgroups, for a subsample of countries

Domain	Description	Male	Female
	High-income	8.4	6.6
Income	Upper-middle-income	44.6	39.5
	Lower-middle-income	55.1	45.9
	Low-income	93.3	93.5
	EAP	29.6	21.1
	ECA	10.0	8.2
	LAC	53.0	48.9
Regions	MNA	66.0	56.8
	NAC	8.0	7.1
	SAR		
	SSA	86.4	83.0
World	Low- and middle-income	55.5	49.8
World	All	43.6	38.9

Source: Azevedo and others (2019) using the Global Learning Assessment Database (https://github.com/worldbank/GLAD); UIS Enrollment Data; and UN population numbers. Note: Gender breakdowns calculated using 91 cross-national learning assessments: LLECE, PASEC, PIRLS, SAQMEC, and TIMSS. All assessment data are from after 2010, except for SAQMEC (for Southern and Eastern Africa), where the data are from the Third Round carried out in 2007. Estimates do not reflect the national learning assessments in the data set, because of a lack of sex-disaggregated data. Gender breakdown is not possible for South Asia, due to reliance on national learning assessments that do not systematically report that information. Averages of the male and female columns do not match the global averages reported earlier due to changes in the country composition.

Source: World Bank, Ending Learning Poverty: What will it take?, World Bank, Washington, D.C., 2019, p. 17.

Figure 1. Data gaps in measuring learning poverty: Share of population of children in countries with dated or no learning assessment data, by region, World Bank lending status and income level



Source: Azevedo and others (2019) using the Global Learning Assessment Database (https://github.com/worldbank/GLAD). Note: Low-, middle-, and high-Income data include only assessments since 2010; Old data include assessments from before 2010; Regions: East Asia and Pacific (EAP), Europe and Central Asia (ECA), Latin American and Caribbean (LAC), Middle East and North Africa (MNA), North America (NAC), South Asia (SAR), and Sub-Saharan Africa (SSA); Lending Categories: International Development Association (IDA); International Bank for Reconstruction and Development (IBRD); and IDA/IBRD Blend countries, meaning those that are IDA-eligible based on per-capita income levels but also creditworthy for some IBRD borrowing (Blend). Low- and middle-income includes six high-income IBRD clients.

Source: World Bank, Ending Learning Poverty: What will it take?, World Bank, Washington, D.C., 2019, p. 13.

Annex 2. Service Delivery Indicators (SDI) survey findings, by country and year

	Kenya	Mozambique	Senegal	Togo	Madagascar	Nigeria	United Republic of Tanzania l	United Republic of Tanzania II*	Uganda
Year	2012	2014	2010	2013	2016	2013	2010	2014	2013
Absence from classroom (% of teachers)	42.2	26	59	33.6	37.9	21.7	23	46.7	52.5
Absence from school (% of teachers)	15.5	45	18	18.4	30.7	14.2	23	14.4	23.8
Scheduled teaching time (hours and minutes per day)	5h 41 min.	4h 17min.	4h 36min.	5h 29min.	5h 12min.	4h 53min.	5h 12min.	5h 56min.	7h 19min.
Time spent teaching (hours and minutes per day)	2h 40min.	1h 41min.	3h 15min.	2h 39min.	3h 10min.	3h 44min.	2h 4min.	2h 46min.	3h 17min.

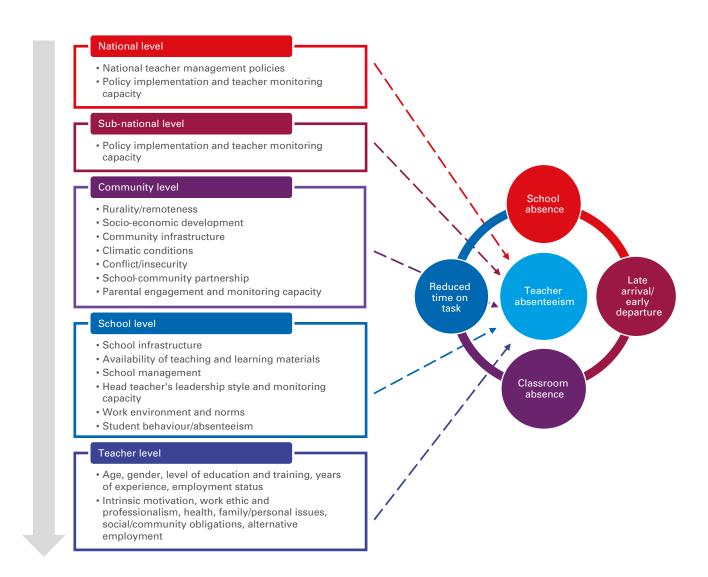
Source: World Bank, Data Catalog, 'Service Delivery Indicators', https://datacatalog.worldbank.org/dataset/service-delivery-indicators, accessed 16 February 2020.

 $^{^{\}ast}$ Tanzania has implemented SDI twice (in 2010 and 2014).

Annex 3. Exploratory framework

The Time to Teach (TTT) study has adopted a comprehensive exploratory framework, following the work of Guerrero et al. (2012), according to which there are three sets of factors (both within and outside the education system) affecting teacher attendance: (1) teacher-level factors; (2) school-level factors; and (3) community-level factors. Expanding this framework, the TTT study also looks at national and sub-national level factors affecting different types of teacher absenteeism, as illustrated below.

The Time to Teach explanatory model



Source: Adaptation of the work of Guerrero et al. (2012): Guerrero, G., Leon, J., Zapata, M., Sugimaru, C., & Cueto, S. (2012). What works to improve teacher attendance in developing countries?: A systematic review.

Annex 4. Data and methods

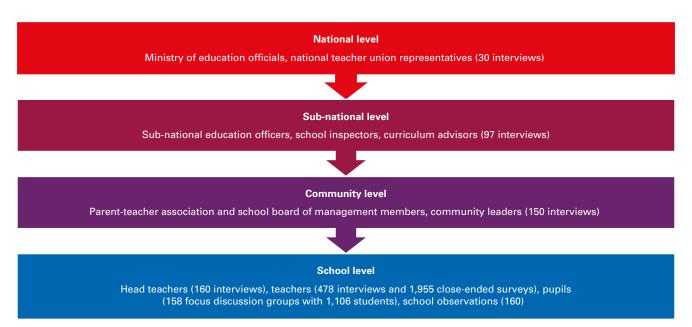
The Time to Teach study draws from national, system-wide, qualitative data collections and school observations, and a census of teachers working in 160 purposively selected schools (20 schools per country/territory). In most participating countries, three criteria were used in selecting schools: location (aiming for the broadest geographic coverage possible), governance (public, private or community) and degree of rurality (rural or urban/peri-urban).

Qualitative data were collected through approximately 915 semi-structured interviews with key education stakeholders across the region (ministry of education officials, sub-national education officers, community representatives, head teachers and teachers); 158 focus group discussions with approximately 1,106 students (aged 10–13 years); and 160 structured school observations. Student respondents were selected on the basis of their age and gender. Age, gender, years of experience and education were the selection criteria for interviewed teachers.

Quantitative data were collected through a census approach, whereby all teachers present at selected schools during field visits were required to complete a close-ended survey. Self-reported data were received from 1,955 teachers. In each school, all teachers took the survey, but only three teachers were interviewed. The survey was administered to 1,955 teachers, however, due to partial completion, findings presented in the report are based on self-reported data from 1,930 teachers. It is important to note that these data were drawn from schools selected for qualitative collections, and therefore are only representative of the 160 schools selected across the region and not the region as a whole.

Thematic content analysis was employed to analyse and code over 15,000 pages of transcribed interviews and focus group discussions. The Stata software package was used for the descriptive and correlational analysis of survey data.

Figure 1. Study participants and research instruments by level of analysis (total numbers in bracket)



Annex 5. Time to Teach Teacher Survey

Introduction and Instructions

This survey is part of a study undertaken by UNICEF in partnership with the Ministry of Education. The study wants to understand what difficulties teachers all over <<name of the country>> face in their daily work and how these difficulties affect teacher attendance and pupil learning. The <<name of school>> has been selected for this survey. The information you provide will help us understand how working conditions in this school - and in other schools all around the country - can be improved and how teachers can be further supported to effectively serve their communities.

Most questions require you to tick ONE box. In some questions, as specified, you can tick more than one boxes. When you see dots (.....) it indicates that you can write out an answer. If you do not understand a question, please raise your hand and ask us.

You are not obliged to participate in the survey nor do you have to answer all questions. All of the answers you give will remain confidential and will not be shared with anyone other than members of our team. Your responses will be aggregated with those of others and your name will not be mentioned anywhere.

Survey Details

NOTE: To be filled in and signed by the enumerator and the supervisor, not by teachers.

Province/District	
City – town – village/community	
School name and code	
School type (tick all appropriate boxes)	 Urban Rural Private Public Other (Specify)
Date of survey	
Location of survey	
Survey start time	
Duration of survey (in minutes)	
Name and signature of enumerator	
Name and signature of supervisor	

SECTION I Personal Characteristics and Information

Please use the dotted area to provide your responses. Where alternative responses are offered please tick only ONE box, UNLESS otherwise specified.

1. Name:								
2. Sex:								
	Female	☐ Male						
3. Age:								
4. Marital stat	tus:							
	Married	Single						
5. Number of	children:							
	□ 0	_ 2	□ 4					
	<u> </u>	□3	<u></u> 5+					
6. Work expe	5. Work experience:							
	<pre>< 1 year</pre>	6-15 years	26+ years					
	1-5 years	☐ 16-25 years						
7. Highest lev	el of education comple	ted:						
	None	Secondary	Graduate					
	☐ Primary	☐ Vocational						
	Middle	☐ Tertiary						
8. Highest tea	aching / training qualific	ation obtained:						
9. Which grac	de(s) / subject(s) do you	teach?						
10. How man	y years have you been	teaching at this school?.						
11. On averag	e, how many pupils are	e there in your class(es)?.						

12.	Do you teach at this school only? If not, where else do you teach?
	Please specify school name and location
13.	Are you studying or in training right now?
	□No
	Yes Please specify
14.	How long does it take you to get to work every day? Please provide an answer by type of season and specify means of transport.
	Dry season: Time (in hours and minutes)
	Transport (e.g. car, on foot, other)
	Rainy season: Time (in hours and minutes)
	Transport (e.g. car, on foot, other)
15.	How many people live in your home?
16.	Are you the only earner in your household?
17.	What is your monthly salary as a teacher?
18.	As a teacher, do you receive <u>cash</u> benefits (on top of your monthly salary) for:
	Please tick as many boxes as required
	☐ Transportation
	Housing
	Other, please specify
19.	As a teacher, do you receive any non-cash benefits for:
	Food
	Accomodation
	☐ Cattle
	Other, please specify

20.	0. Are your total earnings as a teacher enough to cover your monthly household expenditures?						
		Yes					
		□No					
21.	Do you earn	money from activities other t	han teaching?				
		Yes					
		□No					
	If yes, please	e specify what these activities	s are and how much you earn	from them every month			
	Activities:						
	Monthly earr	nings:					
22.	What are the	e main reasons that may some	etimes <u>keep you away from s</u>	chool?			
	Please tick u	p to three boxes:					
		Transportation	Social/Community obligations	Not enough pupils present			
		Weather	Strikes or other forms of protest	Family reasons			
		Lack of pay	Receiving your pay	Lack of security			
		Health problems					
		☐ Distance to school					
		Official school business ((e.g. training, seminar)				
		Other income-generating	activity				
		Other reason(s), please s	specify				
		☐ I'm never away from sch	ool (in this case, go straight t	o Q. 25)			

23. Since the sta	art of the school year how oft	en have	you missed school (o	n average)?				
	A few times (less than th	ree)	Once a week					
	Less than once a week		☐ More than once	a week				
24. How many d	ays were you absent from scl	hool?						
In the past week	(Do not count official holiday	's)						
In the past mont	h (Do not count official holida	ys)						
	25. What are the main reasons that may sometimes cause you to arrive at school late or leave school early?							
Please tick u	Please tick up to three boxes:							
	☐ Transportation		ial/Community gations	Not enough pupils present				
	☐ Weather		kes or other forms rotest	☐ Family reasons				
	☐ Lack of pay	Rec	eiving your pay	☐ Lack of security				
	Health problems							
	☐ Distance to school							
	Official school business	(e.g. trair	ning, seminar)					
	Other income-generating	g activity						
	Other reason(s), please s	specify .						
	☐ I never arrive late/leave e	early (in t	his case go straight t	o Q. 28)				

26. Since the star	t of the school year, how often have you arrived at school late or had to leave early?
	A few times (less than three)
	Less than once a week
	Once a week
	☐ More than once a week
27. How many tir	nes did you arrive at school late or left school early?
In the past week	
In the past month	1
	main reasons that may sometimes <u>keep you outside of the classroom,</u> you are physically present at school?
Please tick up	to three boxes:
	Administrative reasons (e.g. office work, teachers' meeting)
	Official school business (e.g. planning, training, seminar)
	Too many class preparation tasks (planning lessons, correcting homework, etc.)
	☐ Not enough pupils present
	Lack of teaching materials/aids required to teach a class
	☐ Health problems (yours' or the pupils')
	Weather
	☐ Lack of security
	Strikes or other forms of protest
	Other reason(s), please specify
	☐ This has never happened to me (in this case go straight to Q. 31)
29. Since the star (on average)?	t of the school year, how often have you missed a scheduled class while at school
	A few times (less than three)
	Less than once a week
	Once a week
	☐ More than once a week

30. How many time	es did you miss a scheduled class, even though you were at school?
In the past week	
In the past month .	
31. What are the ma	ain reasons that may sometimes <u>limit the time you spend on teaching, while in the</u>
Please tick up to the	ree boxes:
	The pupils are misbehaving
	Lack of teaching materials required to teach a class
	Too many class preparation tasks (planning lessons, correcting homework, etc.)
	Weather (too cold/hot)
	Health problems (yours or the pupils')
	I don't have the training required to deliver some lessons
	The pupils have trouble following the class
	Not enough pupils present
	I am distracted by family/personal problems
	Other reason(s), please specify
	I always spend the time I've planned on teaching (in this case go straight to Q. 34)
	of the school year, how often have you faced difficulties that prevented you from me you have planned on teaching while in the classroom (on average)?
	A few times (less than three)
	Less than once a week
	Once a week
	More than once a week
33. How many time	es did you have to reduce your in-class teaching time?
In the past week	
In the past month.	

34. When your pupils struggle to follow the class, what do you think are the main reasons?						
Please tick up to three boxes:						
☐ The language of ins	truction is different from the one pupils speak at home					
☐ The pupils are sick						
\Box The pupils are hung	ry					
☐ The pupils are not o	bedient					
\Box The pupils or their ${\mathfrak p}$	parents do not take school seriously					
☐ I lack the materials	required to teach some subjects					
☐ I need more training	g on class management or lesson organization					
☐ I need more conten	t knowledge to deliver some lessons well					
Other reason(s), ple	ase specify					
35. Since the start of the school year, how often have you observed that many of your pupils had a hat time following the class (on average)?						
Never						
A few times (less the	nan three)					
Less than once a w	eek					
Once a week						
☐ More than once a v	veek					
36. When in the classroom and teaching, understanding the lesson?	how often did you observe that many of the pupils had trouble					
In the past week						
the past month						

SECTION II Personal Views and Opinions

Please CIRCLE only ONE response to each statement. Higher numbers indicate a higher level of agreement with the statement.

(1= Strongly disagree, 2 = Disagree, 3 = Not sure, 4 = Agree, 5 = Strongly agree)

1.	I am satisfied with r	my job.					
	1	2	3	4	5		
2.	Most of my colleagu	ues in this	school are sa	tisfied with the	eir jobs.		
	1	2	3	4	5		
3.	I am happy with my	salary as a	a teacher.				
	1	2	3	4	5		
4.	I receive my salary of	on time.					
	1	2	3	4	5		
5.	It is easy to receive	my salary.					
	1	2	3	4	5		
6.	I have access to trai	ining oppor	rtunities.				
	1	2	3	4	5		
7.	I have the knowledg	ge and skill	s needed to t	each well.			
	1	2	3	4	5		
8.	Most teachers at th	is school h	ave the know	ledge and skil	ls needed to tea	ach well.	
	1	2	3	4	5		
9.	Most teachers at th	is school h	ave the teach	ing materials	they need to tea	ach.	
	1	2	3	4	5		
10	. The working enviro	nment in t	his school is g	good.			
	1	2	3	4	5		
11	. Most teachers in th	nis school v	work well with	n one another.			
	1	2	3	4	5		

12. M	ost teachers ir	n this school a	re always pr	esent.			
	1	2	3	4	5		
13. I f	eel upset whe	n I am absent	from schoo	or unable to t	each.		
	1	2	3	4	5		
14. M	ost of my colle	eagues feel up	oset when ak	sent from sch	nool or unable to	teach.	
	1	2	3	4	5		
15. M	ost teachers ir	n this school c	often come la	ate and/or leav	e early.		
	1	2	3	4	5		
16. W	hen in school,	teachers alwa	ays attend cl	asses.			
	1	2	3	4	5		
17. Th	e head teache	er is always at	school.				
	1	2	3	4	5		
18. ľn	n happy with t	he feedback l	receive fron	n the head tea	cher on my wor	rk.	
	1	2	3	4	5		
19. Th	e head teache	er encourages	teacher trair	ning.			
	1	2	3	4	5		
20. Th	e head teache	er supports tea	achers' invol	vement in sch	ool's decision-m	naking.	
	1	2	3	4	5		
21. Th	e head teache	er discourages	teacher abs	ences.			
	1	2	3	4	5		
22. Th	e head teache	er always reco	rds teacher a	absences.			
	1	2	3	4	5		
23. Th	e head teache	er manages th	e school and	the teachers	well.		
	1	2	3	4	5		
24. Sc	hool inspector	rs and academ	nic advisors v	visit this schoo	ol regularly.		
	1	2	3	4	5		

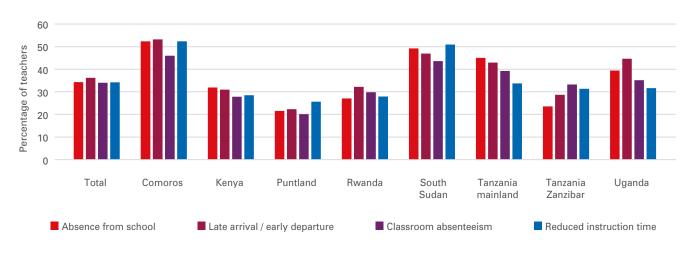
Teacher attendance	and time	on task in	Eastern	and Southern	Africa

25. School inspectors and academic advisors motivate and inspire school staff.										
		1	2	3	4	5				
26.	School and prac		and academic	advisors	prioritize	infrastruc	tural iss	ues ove	r teaching	methods
		1	2	3	4	5				
27.	School i	nspectors ar	d academic a	dvisors disc	courage te	eacher abs	enteeisr	n.		
		1	2	3	4	5				
28.	School i	nspectors ar	id academic ad	dvisors fred	quently sa	nction tea	cher abs	enteeisr	n.	
		1	2	3	4	5				
29.	In this c	ommunity te	achers are res	spected and	d their wo	rk is recog	gnized.			
		1	2	3	4	5				
30.	Most pa	rents appred	ciate the value	of education	on and en	courage p	upils' att	endance		
		1	2	3	4	5				
31.	Most pa	rents are act	rively engaged	in school r	matters.					
		1	2	3	4	5				
32.	Most pa	rents view t	eacher absenc	es as a pro	blem.					
		1	2	3	4	5				
33.	Most pu	ıpils are well	-motivated to	study.						
		1	2	3	4	5				

Annex 6. Percentage of teachers who reported being absent in various ways "more than a few times" since the start of the school year, by country and average

How many times did you arrive at school late or leave?

Percentage of teachers who reported being absent "more than a few times" since the start of the school year, by form of absence and country



Annex 7. Correlation matrix for forms of absenteeism, as reported by teachers

	TA1	TA2	TA3	TA4
TA1	1.00			
TA2	0.4752	1.00		
TA3	0.3810	0.4061	1.00	
TA4	0.3448	0.3369	0.4093	1.00

TA1: Absence from school

TA2: Late arrival/early departure

TA3: Absence from the classroom

TA4: Reduced time on task (while in the classroom)

Annex 8. Types and frequencies of teacher absences, according to the Time to Teach survey

Figure 1. Primary reasons for school absenteeism

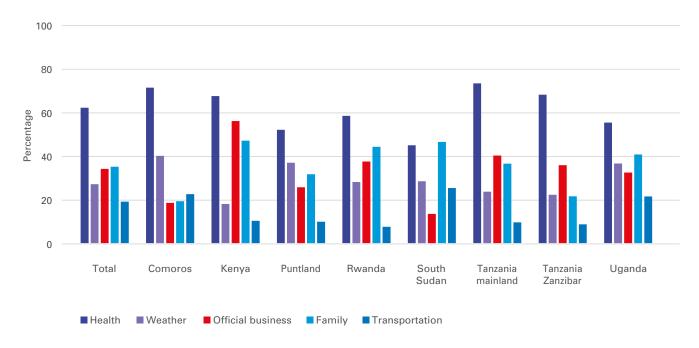


Figure 2. Primary reasons for late arrival and early departure

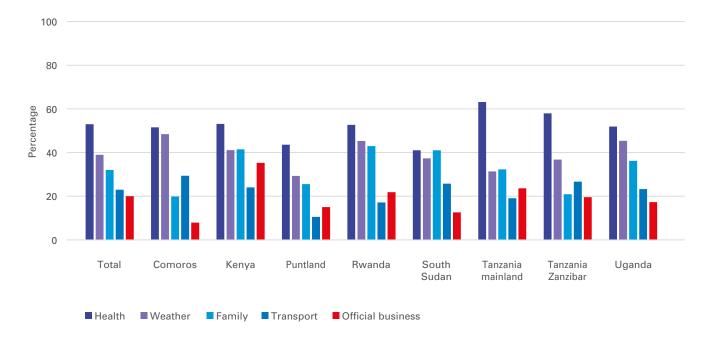


Figure 3. Primary reasons for classroom absenteeism (while at school)

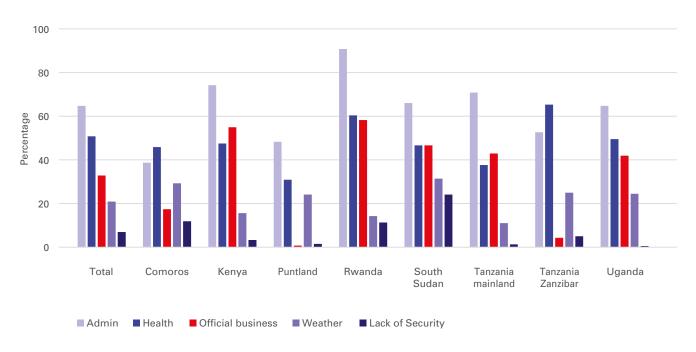
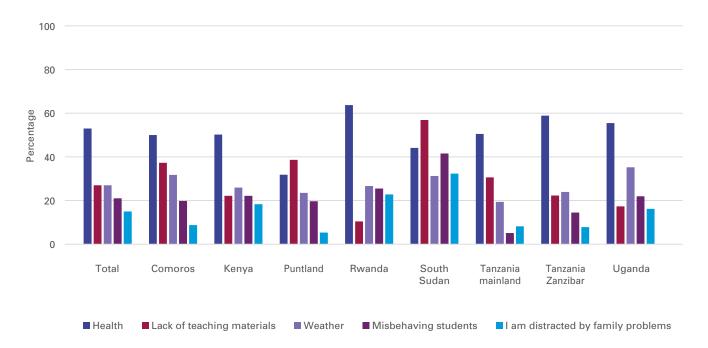


Figure 4. Primary reasons for reduced time on task (while in the classroom)



Annex 9. Factors associated with the different forms of teacher absenteeism

Table 1. Factors associated with the different forms of teacher absenteeism, according to teachers

Factor	Absence from school (TA1)	Late arrival/early departure (TA2)	Absence from the classroom (TA3)	Reduced time on task (TA4)		
	Odds ratio					
Strikes	2.09***	2.82***				
Distance to school	1.54*	1.51**				
Difficulties with receiving pay	1.58*	1.93**				
Transportation		1.30*				
Lack of teaching and learning materials			2.56***	2.28***		
Weather (too hot/cold)			1.43**	1.41**		
Official school business (e.g. training)			1.29*			
Pupils have trouble following the lesson				1.69**		
Not enough students present				1.70**		
Family/personal problems				1.45*		
Lack of training						
III health				1.26*		
Too many classroom preparations (e.g. marking and planning)				1.52*		
Language of instruction						
Other reason		2.61*		1.88*		

Note: To read this table, consider the example of 'strikes'. The odds ratio of 2.09 for the 'strikes' reason in reference to absence from school (TA1) means that, on average, a teacher who answered 'strikes' as a reason was 2.09 times more likely to have reported being frequently absent from school (more than a few times since the beginning of the school year) than a teacher who did not answer 'strikes', other things being equal. The number of asterisks (*) gives a measure of the strength of the evidence of the associations between the determinant and the likeliness of reporting absenteeism.

Table 2. Correlations between absenteeism and teacher views/opinions

Teacher views/opinions	Absenteeism (TA1- TA4)
'I'm happy with the feedback I receive from the head teacher on my work'	-0.1054
'The head teacher discourages teacher absences'	-0.146
'The head teacher manages the school and the teachers well'	-0.1096
'I receive my salary on time'	-0.0759
'It is easy to receive my salary'	-0.098
'I have the knowledge and skills needed to teach well'	-0.092

for every child, answers

UNICEF Office of Research – Innocenti Via degli Alfani, 58 – 50121 Florence, Italy

Tel: (+39) 055 20 330 Fax: (+39) 055 2033 220 florence@unicef.org www.unicef-irc.org twitter: @UNICEFInnocenti

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